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Water Year 1980

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Water Resources Data for Alaska

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AK-80-1

WATER YEAR 1980

Prepared in cooperation with the State of Alaska
and with other agencies

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Water Resources Data for Alaska

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AK-80-1

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Prepared in cooperation with the State of Alaska
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas Peck, Director

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Anchorage, Alaska 99501

1981

PREFACE

This report was prepared by personnel of the Alaska district of the Water Resources Division of the U.S. Geological Survey, under the supervision of Raymond S. George, Acting District Chief, succeeded by Philip A. Emery, District Chief and J. W. Wark, Acting Regional Hydrologist, succeeded by J. D. Bredehoeft, Regional Hydrologist, Western Region. It was done in cooperation with the State of Alaska and with other agencies.

This report is one of a series issued by State. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and Robert Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

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Water resources data for the 1980 water year for Alaska consists of records of stage, discharge, and water quality of streams; stage and water quality of lakes; and water levels and water quality in wells and springs. This report contains discharge records for 114 gaging stations; stage only record for 1 gaging station; water quality for 55 stations; and water levels for 33 observation wells. Also included are 56 low-flow, 8 crest-stage, and 2 water-quality partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements of discharge, lake stage, or water quality. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

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[*Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment*]

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[*Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment*]

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[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment]

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INTRODUCTION

Water resources data for the 1980 water year for Alaska consist of records of stage, discharge, and water quality of streams; stage and water quality of lakes; water levels and water quality of ground-water wells; and water quality of springs. This volume contains records for water discharge at 114 gaging stations; stage only at 1 gaging station; water quality at 55 gaging stations; and water levels for 33 observation wells. Also included are data for 56 low-flow, 86 crest-stage, and 21 water-quality partial-record stations and 20 lakes. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

Records of discharge and stage of streams, stage of lakes, chemical quality, water temperatures, and suspended sediment were first published in U.S. Geological Survey water-supply papers. Through September 30, 1960, these data were published in seven water-supply papers entitled, "Quantity and Quality of Surface Waters of Alaska" (through 1950, 1951-53, 1954-56, 1957, 1958, 1959, 1960). Since 1960, streamflow records and related data were published in a five-year series of water-supply papers for 1961-65 and 1966-70 entitled, "Surface Water Supply of the United States." Water-quality records were published in a water-supply paper entitled "Quality of Surface Waters of Alaska, 1961-63" and after then until 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1949 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report AK-80-1." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-2457.

COOPERATION

The U.S. Geological Survey and organizations of the State of Alaska have had cooperative agreements since 1958 for the systematic collection of streamflow records, water-quality records, and ground-water levels. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Alaska Department of Natural Resources, R. E. LeResche, commissioner.

Alaska Department of Fish and Game, R.O. Skoog, commissioner.

Alaska Department of Transportation and Public Facilities in cooperation with the Federal Highway Administration, U.S. Department of Transportation, R. Ward, commissioner.

Alaska Power Authority, E. P. Yould, executive director.

Alaska Department of Environmental Conservation, E. W. Mueller, commissioner.

Municipality of Anchorage, G. M. Sullivan, mayor.

Fairbanks North Star Borough, J. A. Carlson, mayor.

Kenai Peninsula Borough, D. E. Gilman, mayor.

City and Borough of Juneau, M. Winegar, city manager.

Thomas Bay Power Commission, R. L. Ballard, president.

City of Craig, J. F. Sprague, mayor.

Assistance in the form of funds or services was given by the following federal agencies for information published in this report: Corps of Engineers, U.S. Army, for 27 gaging stations and 6 water-quality stations; Forest Service, U.S. Department of Agriculture, for 16 gaging stations and 11 water-quality stations; and Environmental Protection Agency, for water-quality data.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEDGMENT

Alaska district personnel who contributed significantly to the collection and preparation of the data in this report are too numerous to mention individually. However, these people were in the following groups: Hydrology Section, R. D. Lamke, chief; Anchorage Subdistrict, R. S. George, chief, succeded by L. S. Leveen, acting chief; Fairbanks Subdistrict, Bruce Parks, chief; and Juneau Subdistrict, V. K. Berwick, chief, succeded by P. J. Still, acting chief.

HYDROLOGIC CONDITIONS

Streamflow in Alaska for the 1980 water year was excessive (in the highest 25 percent for the period of record) at one-half of the long-term gaging stations (those stations with ten or more years of record). The highest or the next to the highest mean annual discharge occurred at about one-third of the stations, mostly in South-central or Southwest Alaska. Ship Creek in Anchorage and Kenai River had the highest and second highest flows, respectively, in their 34 years of record. In Southwest Alaska, Kvichak River had its highest flow in 14 years of record and Nuyakuk River had the second highest flow in 27 years of record. The excessive runoff was caused by above normal amounts of autumn rainfall, mild winter temperatures, exceptionally heavy snowpack in the mountains, and above normal summer precipitation. Those streams in Southeast Alaska on the mainland with glaciers in their drainages also had excessive runoff. The streams with generally below normal flows were Mahoney Creek near Ketchikan, which had the next to lowest flow in 22 years of record, and Salcha and Chena Rivers in the Yukon River basin near Fairbanks. No widespread floods occurred during the year. However, stations in the Kadashan River basin near Tenakee had the highest instantaneous discharge in 13 to 17 years of record during the October 5-9 period.

In Southeast Alaska, flows during October were excessive in mainland glacier-fed streams. October flows were near normal in island streams. The long-term stations on Mahoney and Fish Creeks near Ketchikan had deficient flows. Runoff during December through March generally was above normal and was excessive in a few cases. April flows were the highest or second highest of record at most Southeastern stations. During May through September, flows in the mainland glacier streams were near or above normal. However, flow in Skagway River was deficient in August and the lowest of record in September. Island streams generally had below normal or deficient flows during May and June and a few streams continued to have below normal or deficient flows during July through September. Pavlof River was the only Southeastern stream gage that recorded excessive flow during August and September.

Most all South-central streams had above normal or excessive runoff in October 1979 because of greater than normal rainfall. Above normal runoff continued from November through April. Runoff during May and June was near normal in inland basins but generally continued to be above normal in streams near the ocean. Flows in July were the highest or second highest of record in most of the coastal streams and continued to be above normal and excessive throughout the remainder of the water year, except for Cordova area streams that had deficient flows in September. Myrtle Creek on Kodiak Island had deficient flows during June through August. The interior streams also had excessive runoff in July. Near normal flows occurred in August and September. The seasonal runoff pattern in Southwest Alaska was very similar to that in South-central. Kvichak River had excessive flows after November and monthly flows were the second highest or highest of record after January.

Runoff in the Yukon River basin was near normal. An exception was the Koyukuk River basin, which had the highest flows during its period of record during January through April and excessive flows in May and July. Another exception were the Fairbanks area streams, many of which had the second lowest or lowest May and June runoff for the period of record. The seasonal runoff pattern in Northwest Alaska and on the Arctic Slope also was about normal. However, the peak and monthly discharges during breakup in June on Nunivak Creek, a small coastal stream near Barrow, were the highest recorded during its short-term record. Also, September runoff in the Nome area was the lowest of record.

Monthly and annual mean discharge for 1980 is compared with median monthly and annual discharge for the period of record in figure 3 at six representative gaging stations throughout the state.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows. See also the table for converting English Units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters (mL) of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Benthic organisms (invertebrates) are animals inhabiting the bottom of an aquatic environment. They include a number of different types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are frequently used as indicators of environmental quality because many have restricted mobility during their aquatic life phase, as well as a relatively long lifespan which allows for response to prevailing and changing water-quality conditions. Many benthic organisms inhabit specific types of environments which, if changed, result in changes in the composition of the benthic community.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material".

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,447 cubic meters.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, or ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream or lake where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO^3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distribution given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocuri (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended-sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere. vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content in the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The use of artificial substrates simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	Hexagenia limbata

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 15303600, which appears just to the left of the station name, includes the 2-digit part number "15" plus the 6-digit downstream order number "303600."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 1 below.

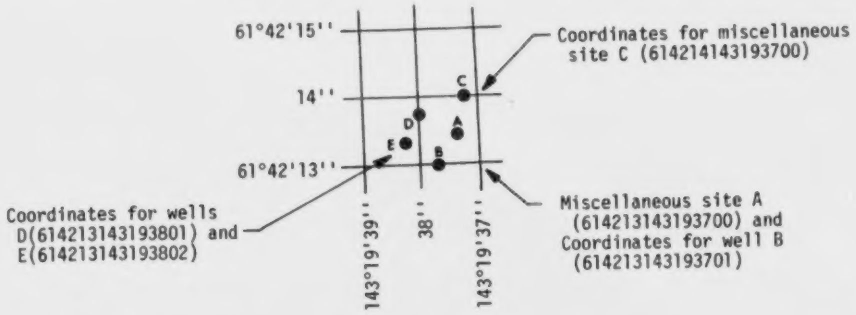

61°42'15''
14''
61°42'13''
143°19'39''
38''
143°19'37''
C
D
A
E
B
Coordinates for miscellaneous site C (614214143193700)
Coordinates for wells D(614213143193801) and E(614213143193802)
Miscellaneous site A (614213143193700) and Coordinates for well B (614213143193701)

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distributuon of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams and stage of lakes. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At most stream-gaging stations in Alaska the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed or estimated on the basis of the available gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge. This happens when the recorder is stopped for the winter or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams a table showing the daily discharge and monthly and yearly discharge is given. Tables of daily mean gage heights are included for some streamflow stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging stations gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 5.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; It is not given for stations having fewer than 5 complete years of record. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge, it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if most of the flow is from a spring. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations. Lake-level data collected at miscellaneous selected lakes are tabulated also.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, flow from springs, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions or for other changes incident to use and control.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is filed in the subdistrict offices at Anchorage, Fairbanks, and Juneau for their areas of responsibility. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER QUALITY RECORDS

Collection and examination of data

Surface water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network consists of observation wells located in the most important aquifers, and therefore the most significant data are obtained from the fewest wells. (See figure 4.)

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. (See figure 1.)

The local number used herein is partly based on the rectangular subdivision of public lands. The first two letters indicate the principal meridian and the quadrant formed by the intersection of the base line and the principal meridian. The first three digits indicate the township in which the well is located, the next three digits the range, and the following two digits the section. Letters following the section number indicate the quarter section, the quarter-quarter section, and so forth to the fourth order subdivision. Each of these subdivisions is lettered counter-clockwise, from the northeast corner. Each well within the smallest order of subdivision is then given a sequential number. Finally, each well within a section is assigned a sequential map number using the last three digits. Thus, SB00601115BCAD1 indicated the Seward meridian (S), the northwest quadrant (B), township 6 north, range 11 west, section 15; and the well is in the SE¼ of the NE¼ of the SW¼ of the NW¼ of the section (BCAD). It was the first well in the 2.5 acre "D" subdivision assigned a sequential number (1). The next three digits, 001, indicate the sequence in which a well was located on a map. Thus 001 indicates it was the first well plotted in the one square mile section. The next space is left blank. The last five numbers, such as 00114, are the Alaska register number, that is provided for continuity with older reports. Therefore, the local number is SB00601115BCAD1001 00114.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet referred to either National Geodetic Vertical Datum (NGVD) or land-surface datum (lsd). National Geodetic Vertical Datum is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom). Daily water levels are reported for a few wells that may have significant fluctuations between every fifth day. The extreme water levels recorded during the year are reported as the highest water level (HWL) and as the lowest water level (LWL).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet or if an electric water sensor must be used, the error in determining the absolute value of the total depth to water may be five or more hundredths of a foot. However, the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. Accordingly, most measurements are reported to a hundredth of a foot, but a few are given only to a tenth of a foot.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation,* by H. H. Stevens,Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
2-D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
2-E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
3-A1. *General field and office procedures for indirect discharge measurements,* by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
3-A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
3-A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
3-A8. *Discharge measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
3-A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
3-B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
3-C1. *Fluvial sediment concepts,* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
3-C2. *Field methods for measurement of fluvial sediment,* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
4-A1. *Some statistical tools in hydrology,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
4-A2. *Frequency curves,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
4-B1. *Low-flow investigations,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
4-B2. *Storage analyses for water supply,* by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
4-B3. *Regional analyses of streamflow characteristics,* by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
4-D1. *Computation of rate and volume of stream depletion by wells,* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
5-A2. *Determination of minor elements in water by emission spectroscopy,* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
5-A3. *Methods for analysis of organic substances in water,* by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis,* by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water,* by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells,* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

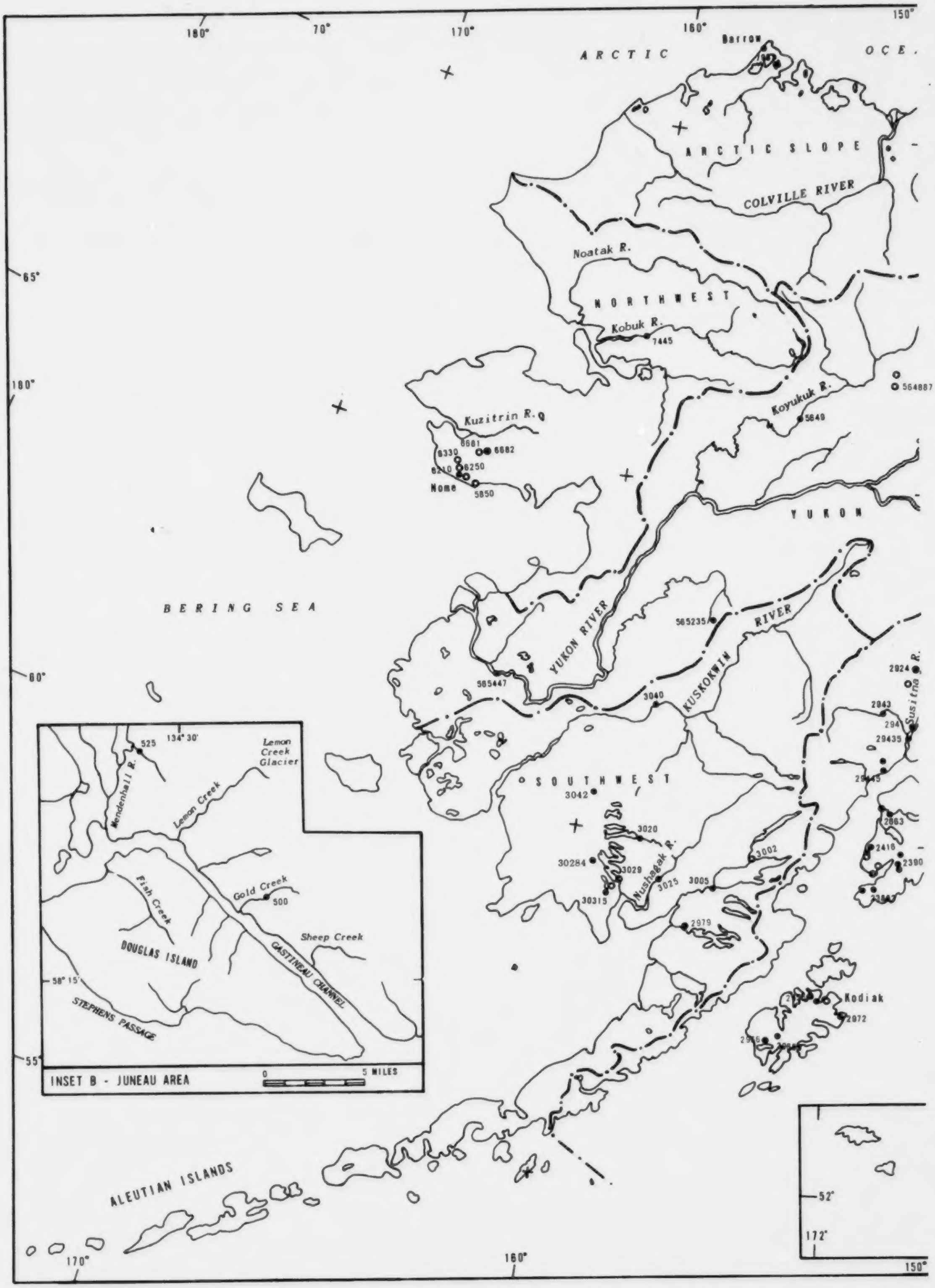
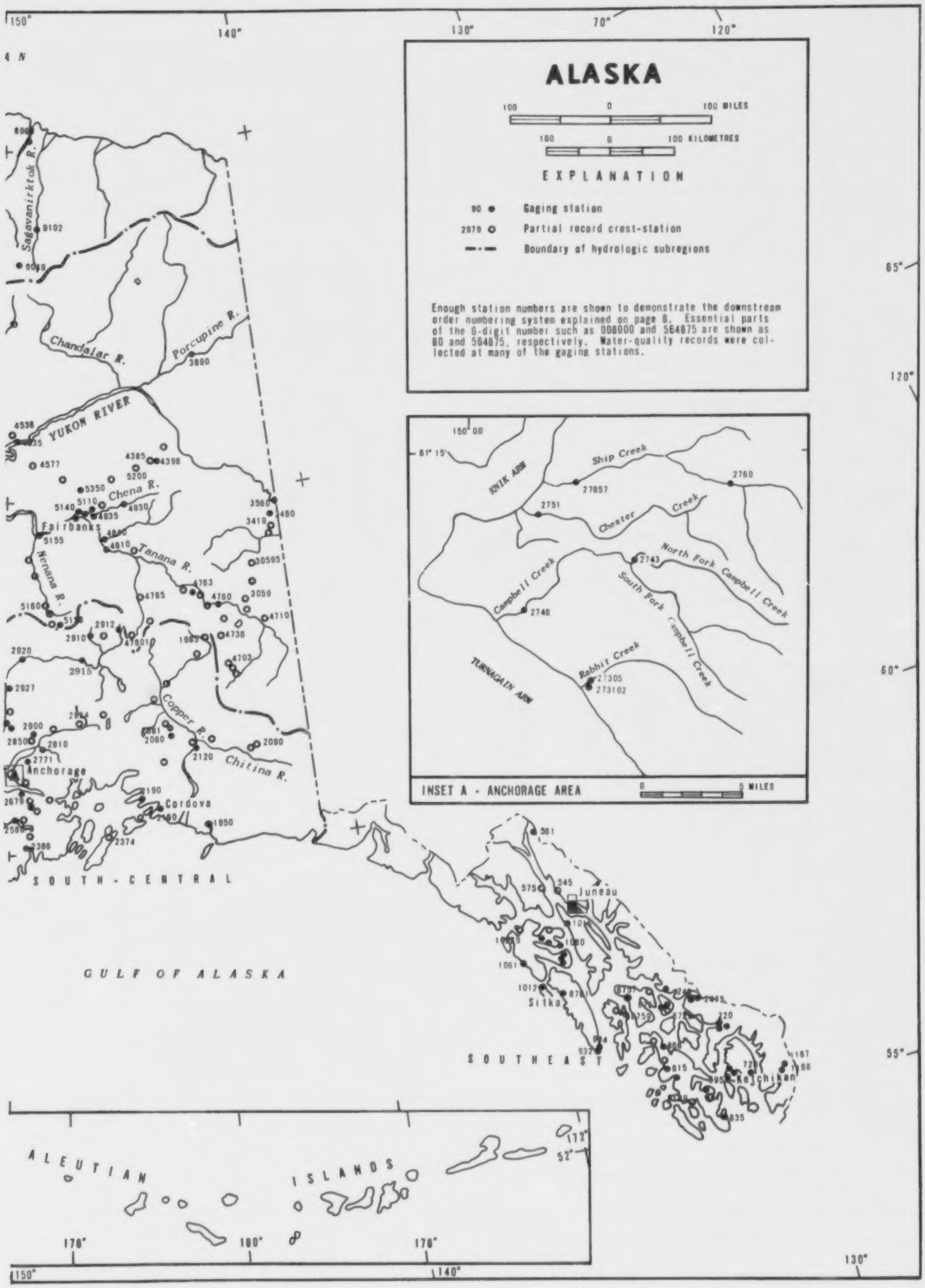

180°
170°
170°
160°
150°
Barrow
ARCTIC
OCE.
ARCTIC SLOPE
COLVILLE RIVER
Noatak R.
NORTHWEST
Kobuk R.
7445
65°
180°
564887
Koyukuk R.
5640
Kuzitrin R.
6681
6682
6330
6250
6210
Nome
5850
YUKON
BERING SEA
YUKON RIVER
565235
KUSKOKWIM
RIVER
565447
3040
60°
2924
Susitna R.
2943
294
29435
29445
SOUTHWEST
3042
3020
30284
3029
30315
Nushagak R.
3025
3005
3002
2979
2863
2416
2390
Kodiak
2972
134° 30'
525
Lemon Creek Glacier
Mendenhall R.
Lemon Creek
Fish Creek
Gold Creek
500
Sheep Creek
DOUGLAS ISLAND
GASTINEAU CHANNEL
58° 15'
STEPHENS PASSAGE
55°
INSET B - JUNEAU AREA
0
5 MILES
ALEUTIAN ISLANDS
170°
160°
150°
52°
172°

Figure 2.--Map showing locations of gaging stations (west of 150° longitude).


ALASKA
100 0 100 MILES
100 0 100 KILOMETRES
EXPLANATION
90 ● Gaging station
2979 ○ Partial record crest-station
—·— Boundary of hydrologic subregions
INSET A - ANCHORAGE AREA
0 5 MILES
150° 00'
61° 15'
KNIK ARM
TURNAGAIN ARM
Ship Creek
Chester Creek
North Fork Campbell Creek
South Fork Campbell Creek
Campbell Creek
Rabbit Creek
2760
27057
2751
2743
2748
27305
273102
Sagavanirktok R.
Chandalar R.
Porcupine R.
YUKON RIVER
Chena R.
Tanana R.
Nenana R.
Copper R.
Chitina R.
Fairbanks
Anchorage
Cordova
Juneau
Sitka
Ketchikan
SOUTH-CENTRAL
SOUTHEAST
GULF OF ALASKA
ALEUTIAN ISLANDS
150°
140°
130°
120°
70°
65°
60°
55°
170°
180°
172°
52°

Enough station numbers are shown to demonstrate the downstream order numbering system explained on page 8. Essential parts of the 6-digit number such as 008000 and 564875 are shown as 80 and 564875, respectively. Water-quality records were collected at many of the gaging stations.

Figure 2.--Continued (east of 150° longitude).

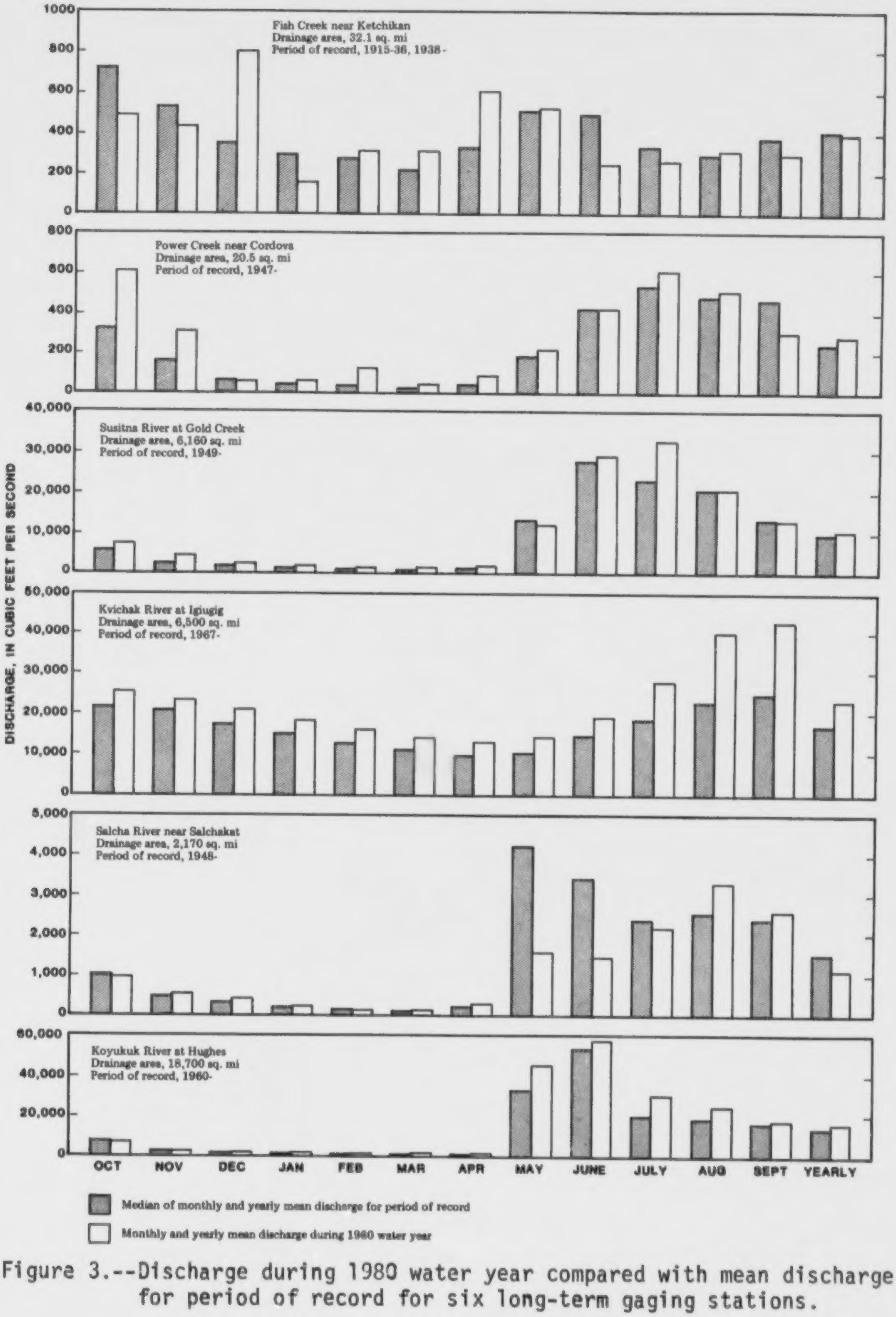


Figure 3.--Discharge during 1980 water year compared with mean discharge for period of record for six long-term gaging stations.

SOUTHEAST ALASKA

15011870 WHITE CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°24'51", long 130°27'38", in NW¼NW¼ sec.36, T.74 S., R.98 E., Hydrologic Unit 1906000, in Tongass National Forest, on left bank 0.5 mi (0.8 km) upstream from mouth and 45 mi (72 km) east of Ketchikan.

DRAINAGE AREA.--2.70 mi^2 (11.25 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,250 ft (380 m), from topographic map.

REMARKS.--Water-discharge records poor prior to Nov. 28, fair during winter period (Nov. 28 to Feb. 13), poor during period of no gage-height record (Feb. 14 to Apr. 30), and good thereafter. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 503 ft^3/s (14.2 m^3/s) Oct. 11, 1977, gage height, 3.53 ft (1.076 m), from rating curve extended above 330 ft^3/s (9.3 m^3/s); minimum daily, 2.2 ft^3/s (0.062 m^3/s) Jan. 5, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 324 ft^3/s (9.18 m^3/s) Dec. 26, gage height, 3.04 ft (0.927 m); minimum daily, 4.0 ft^3/s (0.113 m^3/s) Nov. 12, Sept. 16 and 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	19	8.0	20	6.0	35	8.2	90	42	20	61	22
2	64	16	7.3	19	8.0	32	8.0	44	33	23	60	14
3	27	14	6.9	18	18	18	11	32	39	23	33	20
4	31	11	9.3	16	14	14	13	29	56	22	29	28
5	28	10	141	13	11	12	16	34	65	21	22	53
6	115	9.0	42	12	10	10	21	58	57	18	20	20
7	48	8.0	22	11	64	9.0	30	48	52	17	17	13
8	27	7.0	30	10	46	8.5	22	48	50	15	15	13
9	17	6.5	18	9.5	29	9.0	17	45	42	17	13	22
10	165	5.5	14	9.0	21	10	19	51	34	17	12	12
11	120	5.0	12	8.0	19	9.5	33	63	37	16	11	9.7
12	72	4.0	10	7.5	17	9.0	60	68	35	15	10	7.7
13	120	5.0	9.5	7.5	15	8.0	45	59	35	17	9.2	6.4
14	70	6.0	11	7.0	13	7.0	39	45	34	22	9.8	5.5
15	34	32	15	6.5	12	6.0	50	43	32	22	23	4.5
16	19	17	20	6.4	11	7.0	60	44	28	23	70	4.0
17	21	19	27	5.8	10	8.0	45	45	27	19	60	4.0
18	19	27	40	5.7	9.0	9.0	52	39	23	17	20	10
19	16	20	70	5.3	8.0	9.5	41	55	24	21	14	53
20	13	24	58	5.3	7.4	10	26	42	26	30	12	17
21	12	150	39	5.2	7.2	15	35	32	26	37	9.7	14
22	11	52	19	5.0	6.8	40	40	29	25	31	8.1	25
23	22	30	15	5.0	6.6	30	36	30	25	38	7.9	27
24	20	26	12	5.0	6.4	18	32	34	25	27	7.6	14
25	19	21	25	5.0	6.6	12	29	40	26	27	6.8	18
26	16	25	156	4.8	9.8	10	40	45	27	29	16	12
27	19	17	284	4.8	15	11	48	49	25	30	12	23
28	17	13	96	4.8	24	11	38	46	21	30	8.8	38
29	32	8.8	48	4.6	28	10	35	43	20	31	24	86
30	27	8.5	29	4.6	---	9.0	56	40	20	41	19	51
31	22	---	23	5.4	---	8.8	---	55	---	52	13	---
TOTAL	1319	616.7	1317.0	256.7	458.8	415.3	1005.2	1425	1011	768	653.9	646.8
MEAN	42.5	20.5	42.5	8.28	15.8	13.4	33.5	46.0	33.7	24.8	21.1	21.6
MAX	165	150	284	20	64	40	60	90	65	52	70	86
MIN	11	4.0	6.9	4.6	6.0	6.0	8.0	29	20	15	6.8	4.0
CFSM	15.7	7.59	15.7	3.07	5.85	4.96	12.4	17.0	12.5	9.19	7.82	8.00
IN.	18.17	8.49	18.14	3.54	6.32	5.72	13.84	19.63	13.92	10.58	9.01	8.91
AC-FT	2620	1220	2610	509	910	824	1990	2830	2010	1520	1300	1280

CAL YR 1979 TOTAL 9333.6 MEAN 25.6 MAX 284 MIN 3.2 CFSM 9.48 IN 128.55 AC-FT 18510
WTR YR 1980 TOTAL 9893.0 MEAN 27.0 MAX 284 MIN 4.0 CFSM 10.0 IN 136.25 AC-FT 19620

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1978 to January 1980.
WATER TEMPERATURES: February to April 1978, September 1978 to September 1979, and August to September 1980.

INSTRUMENTATION.--Water-quality monitor since Feb. 2, 1978.

REMARKS.--Missing records were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 98 micromhos/cm Nov. 14 1979, but may have been higher during periods of missing record; minimum recorded, 5 micromhos/cm Dec. 26 and 27, 1979, but may have been lower during periods of missing record.
WATER TEMPERATURES: Maximum recorded, 16.0°C July 31 and Aug. 3, 1979, but may have been higher during period of missing record during July and August; minimum, 0.0°C many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
NOV 28...	1400	9.1	64	6.4	3.0	5	.40	12.1	24	19	9.3	.3
FEB 13...	1500	15	62	6.3	.5	5	.30	--	20	17	7.7	.2
MAY 01...	1130	94	11	6.0	1.0	5	--	13.6	11	9	4.1	.3
AUG 06...	1700	21	29	6.7	9.5	0	--	10.6	15	10	5.5	.2

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
NOV 28...	1.1	.3	7	0	23	.7	.1	5.7	47	44	.00
FEB 13...	.9	.3	4	0	17	.8	.1	4.8	42	34	.05
MAY 01...	.6	.2	2	0	6.6	.0	.1	2.5	7	15	.00
AUG 06...	1.1	.3	6	0	14	.5	.1	5.0	38	30	.00

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
NOV 28...	.020	.01	.010	.42	.43	.44	.000	.000	0	0	0
FEB 13...	.000	.05	.000	.10	.10	.15	.000	.000	1	0	8
MAY 01...	.010	.00	.040	.23	.27	.27	.000	.010	1	0	2
AUG 06...	.010	.00	.000	.26	.26	.26	.010	.000	0	0	10

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
NOV 28...	70	26	0	.1	0	0	30	--	.2	0	.00
FEB 13...	120	1	0	.1	11	0	10	--	.9	--	--
MAY 01...	110	2	10	.1	10	0	20	7.4	.4	1	.25
AUG 06...	80	0	10	.1	10	0	20	1.9	.1	0	.00

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1979 TO JANUARY 1980

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	28	25	50	44	68	64	38	36				
2	40	28	56	50	70	68	39	38				
3	46	25	62	56	72	70	41	39				
4	36	25	67	62	73	29	45	41				
5	38	25	72	67	29	7	47	45				
6	34	25	75	72	29	12	---	---				
7	41	34	79	75	34	27	---	---				
8	52	41	81	79	30	22	---	---				
9	54	26	83	81	36	30	---	---				
10	26	25	87	83	41	36	---	---				
11	28	28	92	87	45	41	---	---				
12	26	24	95	92	49	45	---	---				
13	34	24	97	95	52	49	---	---				
14	37	33	98	30	54	52	---	---				
15	45	37	46	24	58	53	---	---				
16	47	43	54	46	61	58	---	---				
17	44	40	56	30	63	14	---	---				
18	50	44	39	30	16	9	---	---				
19	56	50	49	39	17	13	---	---				
20	61	56	50	22	18	14	---	---				
21	66	61	34	16	28	16	---	---				
22	69	66	---	---	35	28	---	---				
23	72	41	38	21	39	36	---	---				
24	---	---	35	30	40	29	---	---				
25	51	42	44	35	37	11	---	---				
26	58	42	49	44	19	5	---	---				
27	62	50	57	49	10	5	---	---				
28	55	49	63	57	18	10	---	---				
29	55	24	69	63	27	14	---	---				
30	24	35	69	64	33	27	---	---				
31	35	24	---	---	33	36	---	---				
MONTH	72	24	98	16	73	5						

TEMPERATURE, WATER (DEG. C), AUGUST TO SEPTEMBER 1980

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1									---	---	10.0	9.0
2									---	---	9.0	8.0
3									---	---	9.0	8.0
4									---	---	9.0	8.0
5									---	---	8.5	8.0
6									9.0	8.0	9.0	7.0
7									10.0	7.5	8.5	7.0
8									9.0	7.5	8.5	7.5
9									10.5	7.5	9.5	8.0
10									11.0	7.5	9.0	7.5
11									11.5	8.0	8.5	6.5
12									11.5	8.0	8.5	6.5
13									9.5	8.0	8.0	6.0
14									8.5	7.5	9.0	7.0
15									10.0	8.0	9.0	7.0
16									10.0	9.0	9.0	8.0
17									10.0	8.5	8.5	7.5
18									10.0	8.0	10.0	7.5
19									9.5	8.5	9.5	8.0
20									9.0	8.0	8.5	7.5
21									9.0	7.5	7.5	7.0
22									8.5	7.5	8.5	7.0
23									9.0	7.5	8.5	7.5
24									9.0	7.5	8.0	7.0
25									8.5	7.5	8.5	7.5
26									10.0	8.0	8.0	7.0
27									10.0	8.0	9.0	7.5
28									9.0	8.0	8.5	7.0
29									10.0	8.0	8.5	7.5
30									10.5	8.5	8.5	7.0
31									9.5	8.5	---	---
MONTH											10.0	6.0

15011880 KETA RIVER NEAR KETCHIKAN

LOCATION.--Lat 55°21'13", long 130°26'56", in SW¼NE¼ sec.24, T.75 S., R.98 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 1.6 mi (2.6 km) upstream from mouth at head of Boca de Quadra and 45 mi (72 km) east of Ketchikan.

DRAINAGE AREA.--74.2 mi² (193 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Water-discharge records good except those for winter months, which are fair. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,300 ft³/s (858 m³/s) Oct. 31, 1978, gage height, 8.80 ft (2.682 m) from rating curve extended above 3,200 ft³/s (91 m³/s) on basis of slope-conveyance study at gage height 6.23 ft (1.899 m); minimum daily, 46 ft³/s (1.30 m³/s) Feb. 28, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,600 ft³/s (413 m³/s) Dec. 27, gage height, 7.28 ft (2.219 m), from rating curve extended as explained above; minimum daily, 98 ft³/s (2.78 m³/s) Mar. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2070	330	190	316	119	692	129	2530	1240	721	1870	1070
2	1960	266	176	298	151	510	137	1670	839	868	1450	681
3	1050	221	181	285	434	321	195	810	1240	811	800	683
4	1150	191	258	236	276	226	269	626	1870	836	640	1320
5	1120	171	2690	176	219	185	310	893	2170	790	530	1820
6	2950	152	1100	167	191	158	454	1720	1910	625	475	747
7	1760	139	518	161	997	142	627	1420	1700	533	442	449
8	762	128	824	220	1560	139	383	1330	1690	451	428	393
9	514	122	484	455	682	143	303	1240	1420	631	403	1000
10	4900	115	328	406	407	163	327	1530	1070	599	399	510
11	2260	110	297	356	335	157	594	1820	1210	509	405	349
12	1250	106	241	345	369	132	1430	1920	1110	675	385	274
13	2680	149	203	346	353	116	820	1660	1230	735	348	230
14	1080	866	172	371	266	106	773	1060	1130	901	358	206
15	642	382	280	436	207	98	1120	1030	1050	875	1040	212
16	481	321	209	482	270	101	1400	1140	857	1130	2060	320
17	397	640	175	477	170	124	926	1130	758	756	2810	417
18	459	438	1240	439	141	147	1110	931	592	515	807	439
19	370	462	1420	408	128	152	1050	1050	658	705	499	2160
20	291	2100	1280	366	119	176	589	1180	840	1310	453	748
21	245	4070	1010	291	115	407	480	791	869	1560	352	517
22	220	1780	502	156	113	926	777	591	767	1190	301	1150
23	204	693	350	1150	135	394	783	626	838	1500	396	1110
24	384	442	272	640	136	241	573	862	792	923	373	541
25	293	334	371	329	115	182	571	1150	1080	856	339	1050
26	311	263	2010	298	185	164	925	1270	1020	1050	788	606
27	326	205	11700	373	353	166	1020	1540	880	1050	581	982
28	331	191	2580	483	504	181	870	1390	658	1340	385	1570
29	795	171	1180	283	610	173	713	1190	564	1160	794	2770
30	616	174	584	151	---	149	1500	1240	647	1390	783	1850
31	439	---	401	127	---	135	---	1690	---	1530	530	---
TOTAL	32310	15732	33226	11027	9660	7106	21158	39030	32699	28525	22224	26174
MEAN	1042	524	1072	356	333	229	705	1259	1090	920	717	872
MAX	4900	4070	11700	1150	1560	926	1500	2530	2170	1560	2810	2770
MIN	204	106	172	127	113	98	129	591	564	451	301	206
CFSM	14.1	7.07	14.5	4.80	4.49	3.09	9.51	17.0	14.7	12.4	9.67	11.8
IN.	16.21	7.89	16.67	5.53	4.85	3.56	10.61	19.58	16.40	14.31	11.15	13.13
AC-FT	64090	31200	65900	21870	19160	14090	41970	77420	64860	56580	44080	51920

CAL YR 1979 TOTAL 246151 MEAN 674 MAX 11700 MIN 46 CFSM 9.09 IN 123.49 AC-FT 488200
WTR YR 1980 TOTAL 278871 MEAN 762 MAX 11700 MIN 98 CFSM 10.3 IN 139.90 AC-FT 553100

15011880 KETA RIVER NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May to October 1978 and March to November 1979.
WATER TEMPERATURES: May to October 1978 and March 1979 to current year.

INSTRUMENTATION.--Mini-water-quality monitor in conjunction with satellite telemeter since May 26, 1978.

REMARKS.--Records fair. Missing record due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 41 micromhos/cm May 21, 1979; minimum recorded, 9 micromhos/cm Aug. 7, 1978.
WATER TEMPERATURES: Maximum recorded, 14.5°C July 31, Aug. 2, 1978, and Aug. 12, 1980; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT PERIOD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 30 micromhos/cm Oct. 22; 12; minimum recorded, 11 micromhos/cm Nov. 9.
WATER TEMPERATURES: Maximum, 14.5°C Aug. 12; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
NOV												
27...	1200	209	18	6.5	1.5	10	.20	12.2	10	2	3.3	.4
FEB												
13...	1200	403	20	--	.0	10	.80	--	8	--	2.7	.2
MAY												
02...	1500	1590	9	6.8	2.0	10	--	13.4	6	0	2.1	.2
AUG												
05...	1420	553	23	6.7	10.5	0	--	9.9	7	0	2.3	.2

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
NOV											
27...	1.1	.4	10	0	4.9	.7	.0	4.2	19	20	.07
FEB											
13...	.6	.3	--	--	.6	.8	.1	3.2	24	--	.11
MAY											
02...	.6	.2	9	0	1.8	.2	.1	2.3	11	12	.04
AUG											
05...	.6	.3	10	0	.1	.3	.1	2.3	20	11	.35

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
NOV											
27...	.020	.09	.010	.56	.57	.66	.000	.000	0	0	0
FEB											
13...	.000	.11	.010	.00	.01	.12	.000	.000	1	1	7
MAY											
02...	.010	.05	.060	.24	.30	.35	.010	.010	1	0	7
AUG											
05...	.010	.36	.030	.32	.35	.71	.040	.010	0	1	6

15011880 KETA RIVER NEAR KETCHIKAN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV											
27...	120	0	0	.3	2	0	10	2.7	.1	1	.56
FEB											
13...	130	3	0	.1	2	0	0	3.6	.6	--	--
MAY											
02...	370	20	10	.0	1	0	20	7.3	.2	6	26
AUG											
05...	170	3	10	.1	2	0	20	2.6	.1	1	1.5

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER TO NOVEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	23	17	13	13								
2	21	19	13	13								
3	24	21	---	---								
4	24	19	13	12								
5	23	18	13	13								
6	19	17	13	13								
7	23	19	---	---								
8	25	21	---	---								
9	27	14	---	---								
10	18	15	---	---								
11	21	18	---	---								
12	21	17	---	---								
13	21	17	---	---								
14	23	21	---	---								
15	24	23	---	---								
16	25	24	---	---								
17	26	25	---	---								
18	26	25	---	---								
19	27	26	---	---								
20	28	27	---	---								
21	29	27	---	---								
22	30	29	---	---								
23	29	27	---	---								
24	28	12	---	---								
25	13	12	---	---								
26	13	12	---	---								
27	13	12	---	---								
28	13	12	---	---								
29	13	12	---	---								
30	13	12	---	---								
31	13	12	---	---								
MONTH	30	12										

15011880 KETA RIVER NEAR KETCHIKAN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	2.5	2.0	2.0	.0	.5	.0	2.0	1.5
2			---	---	3.0	2.5	2.5	2.0	.5	.0	2.0	1.0
3			---	---	3.0	3.0	2.0	.0	.0	.0	2.0	.5
4			---	---	3.0	2.5	1.5	.0	.5	.0	1.0	.0
5			---	---	3.5	2.0	1.0	.0	1.0	.0	1.5	.0
6			---	---	3.5	3.0	1.0	.5	1.0	.0	1.5	.0
7			---	---	3.5	2.5	.5	.0	1.0	.0	1.5	.0
8			---	---	3.0	2.5	.0	.0	.5	.0	1.0	.0
9			---	---	2.5	2.0	.0	.0	1.0	.0	2.0	.5
10			---	---	2.5	.0	.0	.0	1.0	.0	2.0	.5
11			---	---	2.0	.5	.0	.0	1.0	.0	2.0	.0
12			---	---	1.5	.0	.0	.0	1.0	.0	1.5	.5
13			---	---	.5	.0	.0	.0	.5	.0	2.0	.0
14			---	---	.5	.0	.0	.0	.5	.0	2.5	.5
15			---	---	.0	.0	.0	.0	.0	.0	2.0	.5
16			---	---	.0	.0	.0	.0	.0	.0	1.0	.5
17			---	---	1.0	.0	.0	.0	1.0	.0	3.0	.5
18			---	---	1.0	.0	.0	.0	1.5	.5	1.5	.0
19			---	---	1.5	.0	.0	.0	1.5	.5	2.0	.0
20			---	---	2.0	.5	.0	.0	1.0	.5	3.0	1.0
21			---	---	2.0	.5	.0	.0	1.0	.0	2.0	1.0
22			---	---	1.0	.0	.0	.0	2.0	.5	2.0	1.0
23			---	---	1.5	.0	.0	.0	1.5	.0	3.0	1.5
24			---	---	2.0	1.5	.0	.0	1.5	.0	2.5	1.0
25			---	---	1.5	.0	.0	.0	2.0	.5	3.0	1.5
26			---	---	1.0	.0	.0	.0	2.0	.5	3.5	1.5
27			---	---	2.0	.0	.0	.0	2.0	1.0	2.5	1.5
28			3.0	1.0	2.5	2.0	.0	.0	2.0	1.5	3.0	1.5
29			3.0	2.0	2.0	.5	.0	.0	2.0	1.5	3.5	1.0
30			3.5	2.5	1.5	.0	.0	.0	---	---	2.5	1.5
31			---	---	2.0	.0	.5	.0	---	---	4.0	1.5
MONTH					3.5	.0	2.5	.0	2.0	.0	4.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	1.0	3.5	2.0	6.0	4.0	9.0	7.0	---	---		
2	4.5	1.0	4.0	2.0	9.0	4.0	8.5	7.0	---	---		
3	4.5	1.0	6.0	2.0	9.0	4.5	11.0	6.5	---	---		
4	4.0	1.0	5.5	2.5	9.0	4.5	11.0	7.5	---	---		
5	4.0	2.0	5.0	3.5	9.0	5.0	9.0	7.5	---	---		
6	4.0	2.0	4.5	3.0	9.0	4.5	9.0	7.5	---	---		
7	3.0	2.0	5.0	3.0	9.5	5.0	9.0	7.5	12.0	11.0		
8	4.5	1.5	5.0	3.0	10.0	5.0	9.5	7.0	13.0	9.5		
9	4.5	2.0	7.0	3.0	6.5	5.0	10.5	7.5	11.5	10.0		
10	4.0	2.0	7.0	3.0	8.5	5.5	10.0	7.5	14.0	10.0		
11	3.0	2.0	7.0	3.0	7.5	6.0	12.5	7.5	14.0	10.0		
12	2.0	1.0	7.0	3.0	8.0	5.0	10.5	8.0	14.5	11.0		
13	4.5	.5	4.5	3.5	7.0	5.0	10.0	8.5	14.0	11.0		
14	3.0	2.0	6.5	3.0	7.5	5.0	9.0	8.0	13.0	10.0		
15	2.5	2.0	7.0	3.0	7.0	5.0	8.5	7.5	11.0	10.0		
16	3.0	2.0	5.5	4.0	7.0	5.5	8.5	7.5	---	---		
17	4.0	2.0	5.5	4.0	8.5	5.5	8.5	7.5	---	---		
18	3.0	2.0	5.5	3.5	8.0	5.5	10.5	7.0	---	---		
19	3.5	2.0	5.0	4.0	10.5	5.5	9.5	7.5	---	---		
20	4.0	2.0	5.0	2.0	11.0	6.0	9.5	7.5	---	---		
21	3.5	2.5	6.0	3.5	8.5	6.0	9.5	8.5	---	---		
22	3.5	2.0	8.0	3.0	8.0	6.0	10.0	8.5	---	---		
23	4.5	2.0	8.0	3.5	9.5	5.5	9.5	7.5	---	---		
24	4.0	2.5	7.5	4.0	10.0	6.5	9.5	8.0	---	---		
25	4.5	2.5	6.5	4.5	10.5	7.0	9.5	8.5	---	---		
26	4.0	2.5	8.5	4.0	8.0	7.0	10.0	8.5	---	---		
27	3.5	2.0	8.5	4.0	8.0	6.5	10.0	7.0	---	---		
28	5.5	2.0	5.5	4.5	8.0	6.5	9.5	8.5	---	---		
29	4.0	2.5	8.0	4.5	8.5	6.0	9.0	7.5	---	---		
30	3.5	2.5	6.5	4.0	11.5	7.0	9.0	8.5	---	---		
31	---	---	6.0	4.5	---	---	9.5	8.0	---	---		
MONTH	5.5	.5	8.5	2.0	11.5	4.0	12.5	6.5				

15019990 TYEE LAKE OUTLET NEAR WRANGELL

LOCATION.--Lat 56°12'00", long 131°30'24", in SE¼SW¼ sec.28, T.65 S., R.90 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank of lake outlet 1.5 mi (2.4 km) upstream from mouth at Bradfield Canal and 37 mi (59 km) southeast of Wrangell.

DRAINAGE AREA.--14.7 mi^2 (38.0 km^2).

PERIOD OF RECORD.--October 1979 to September 1980. Records for November 1922 to September 1927 and August 1963 to October 1969, published as Tyee Creek at mouth near Wrangell (station 15020100) are not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Altitude of gage is 1,390 ft (424 m), from topographic map.

REMARKS.--Records poor. Discharges below 10 ft^3/s (0.3 m^3/s) may be in considerable error due to possible flow through the logjams in the outlet channel of the lake. Flow is naturally regulated by Tyee Lake which covers 4.5 percent of drainage area.

EXTREMES OUTSIDE PERIOD OF RECORD.--A maximum discharge of 2,440 ft^3/s (69.1 m^3/s) Oct. 23, 1965 and a minimum of 7.41 ft^3/s (0.21 m^3/s) Mar. 13, 1969 were reported for Tyee Creek at mouth near Wrangell (see WSP 2136).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 752 ft^3/s (21.3 m^3/s) Oct. 10, gage height, 8.10 ft (2.469 m), from rating curve extended above 320 ft^3/s (9.1 m^3/s); maximum gage height, 8.52 ft (2.597 m) Aug. 2; minimum discharge, 1.4 ft^3/s (0.040 m^3/s) Apr. 2 and 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	525	56	34	24	9.0	8.8	1.8	320	404	178	625	61
2	433	50	29	23	10	7.8	1.4	403	347	233	661	58
3	335	46	25	21	13	7.0	1.4	308	320	230	514	58
4	347	40	21	20	15	6.4	1.5	200	372	222	454	120
5	446	37	32	18	18	5.8	1.8	131	508	225	342	196
6	405	34	50	17	22	5.4	3.5	154	635	199	244	186
7	261	31	36	16	26	5.0	9.1	228	648	161	169	117
8	138	29	30	15	30	4.7	12	253	648	126	119	80
9	407	27	25	15	26	4.5	13	268	644	112	92	108
10	713	25	22	14	23	4.2	13	265	576	129	74	76
11	600	23	20	13	20	4.0	22	292	540	123	62	46
12	664	22	18	13	17	3.9	49	335	506	124	57	33
13	621	20	17	12	15	3.7	58	396	526	128	58	28
14	443	86	16	12	14	3.6	59	374	534	170	86	21
15	313	103	15	11	12	3.5	83	346	495	173	172	18
16	220	99	14	11	11	3.5	117	330	448	162	241	20
17	160	115	30	11	10	3.5	132	339	394	150	434	35
18	120	90	70	11	9.4	3.6	112	340	320	118	375	37
19	94	72	133	10	8.8	2.9	125	320	252	167	268	81
20	78	204	167	10	8.0	2.7	101	265	207	368	183	168
21	64	410	205	10	7.6	3.2	78	192	199	421	106	106
22	54	648	140	13	7.2	8.2	83	130	192	503	60	83
23	58	490	83	17	6.8	9.5	88	110	258	489	54	181
24	62	343	61	20	6.4	8.8	75	124	269	421	57	177
25	68	204	54	16	6.0	8.0	69	179	259	352	43	126
26	61	105	47	13	7.0	7.5	74	238	272	316	48	202
27	62	80	41	12	8.2	7.2	103	288	288	270	39	147
28	68	62	36	11	9.2	6.7	136	330	279	316	32	160
29	74	50	32	9.4	10	5.4	123	340	230	330	49	255
30	70	40	29	8.6	---	3.9	145	347	190	340	65	470
31	62	---	27	8.0	---	2.8	---	384	---	452	54	---
TOTAL	8026	3641	1559	435.0	385.6	165.7	1890.5	8529	11760	7708	5837	3454
MEAN	259	121	50.3	14.0	13.3	5.35	63.0	275	392	249	188	115
MAX	713	648	205	24	30	9.5	145	403	648	503	661	470
MIN	54	20	14	8.0	6.0	2.7	1.4	110	190	112	32	18
CFSM	17.6	8.23	3.42	.95	.91	.36	4.29	18.7	26.7	16.9	12.8	7.82
IN.	20.31	9.21	3.94	1.10	.98	.42	4.78	21.58	29.76	19.50	14.77	8.74
AC-FT	15920	7220	3090	863	765	329	3750	16920	23330	15290	11580	6850

WTR YR 1980 TOTAL 53390.8 MEAN 146 MAX 713 MIN 1.4 CFSM 9.93 IN 135.10 AC-FT 105900

15020500 EAST FORK BRADFIELD RIVER NEAR WRANGELL

LOCATION.--Lat 56°14'30", long 131°15'12", Hydrologic Unit 19060000, in Tongass National Forest, on right bank 0.6 mi (1.0 km) upstream from small right bank tributary, 10.2 mi (16.4 km) upstream from confluence with North Fork Bradfield River, 47 mi (76 km) southeast of Wrangell.

DRAINAGE AREA.--63.3 mi^2 (164 km^2).

WATER-DISCHARGE RECORD

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, Dec. 30 to Mar. 17, which are estimated and poor.

EXTREMES FOR CURRENT PERIOD.--June to September 1979: Maximum discharge during period, 3,970 ft^3/s (112 m^3/s) Sept. 30, gage height, 5.44 ft (1.658 m); minimum, 568 ft^3/s (16.1 m^3/s) Sept. 21, gage height, 2.03 ft (0.619 m).

Water Year 1980: Maximum discharge, 6,260 ft^3/s (177 m^3/s), Oct. 9, gage height, 7.00 ft (2.134 m); minimum, 34 ft^3/s (0.96 m^3/s) Nov. 12, gage height, 0.88 ft (0.268 m).

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	---	1110	1980	1350
2								---	---	1190	1520	1590
3								---	---	1190	1170	1270
4								---	---	1200	1120	1080
5								---	---	1380	1140	946
6								---	---	1420	1140	821
7								---	---	1360	1100	710
8								---	---	1290	968	893
9								---	---	1520	946	953
10								---	---	1740	984	1060
11								---	---	1600	1010	792
12								---	---	1470	1080	1710
13								---	---	1280	1220	2230
14								---	---	1180	1400	1930
15								---	---	1170	1330	1800
16								---	---	1290	1210	2020
17								---	---	1650	1150	1890
18								---	---	1840	1170	1400
19								---	---	1650	1120	930
20								---	---	1990	1250	676
21								---	1030	2140	1250	621
22								---	1020	2000	1220	607
23								---	1180	1450	1340	640
24								2200	1300	1340	1390	933
25								1820	1200	1450	1410	1870
26								1490	1350	1460	1380	1420
27								2580	1420	1280	1290	2180
28								3090	1380	1290	1150	1420
29								3130	2370	1160	984	906
30								3050	1620	1420	901	1890
31								2760	---	1820	1380	---
TOTAL								---	---	45330	37703	38538
MEAN								---	---	1462	1216	1285
MAX								---	---	2140	1980	2230
MIN								---	---	1110	901	607
CFSM								---	---	23.1	19.2	20.3
IN.								---	---	26.64	22.16	22.65
AC-FT								---	---	89910	74780	76440

15020500 EAST FORK BRADFIELD RIVER NEAR WRANGELL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1630	149	99	340	185	520	47	1270	859	1160	1900	991
2	879	116	83	290	320	350	60	816	717	1290	1530	864
3	1010	94	78	255	310	265	88	476	1130	1410	1430	864
4	936	90	84	205	275	225	123	393	1580	1310	1550	1240
5	1520	73	520	170	255	188	159	503	1960	1170	1130	1510
6	687	60	299	145	320	148	205	929	1770	1050	1250	886
7	432	59	149	125	425	135	256	795	1690	953	1170	586
8	339	52	150	110	365	122	170	796	1730	1030	1170	667
9	3750	55	124	98	270	120	152	734	1510	1090	1180	1100
10	2500	50	91	86	218	118	158	838	1340	1090	1220	751
11	1800	42	82	78	190	104	342	971	1510	1070	1400	556
12	2810	39	73	73	175	95	763	1180	1400	1280	1360	478
13	1280	92	66	70	160	86	374	1060	1730	1450	1270	439
14	830	878	60	67	145	81	514	777	1470	1330	1320	444
15	544	329	57	63	132	77	637	827	1390	1340	1450	670
16	428	352	53	60	125	79	920	885	1230	1200	2050	991
17	459	493	53	58	118	89	616	887	1100	1010	2230	1180
18	334	251	60	55	108	60	570	729	910	2040	1180	814
19	256	291	76	51	103	54	532	674	898	2270	1090	1690
20	206	1390	300	46	92	181	377	540	1030	2150	938	938
21	175	2080	800	44	87	199	312	421	1060	2190	792	618
22	153	1180	300	50	83	391	666	397	1170	2110	690	991
23	362	434	170	100	80	147	465	500	1220	1430	840	1250
24	333	265	113	150	82	88	353	699	1130	1400	857	730
25	235	191	116	265	103	66	340	919	1410	1500	737	1300
26	219	144	400	195	200	61	493	979	1430	1130	807	1020
27	213	107	1550	165	275	63	560	1110	1360	1250	690	1050
28	212	100	1450	140	350	74	482	1080	1050	1560	637	1360
29	291	89	900	140	380	59	404	1020	1000	1510	925	1970
30	237	94	540	165	---	49	787	945	1120	2220	842	1930
31	170	---	360	178	---	42	---	1200	---	2300	730	---
TOTAL	25230	9639	9256	4037	5931	4336	11925	25350	38904	45293	36365	29878
MEAN	814	321	299	130	205	140	398	818	1297	1461	1173	996
MAX	3750	2080	1550	340	425	520	920	1270	1960	2300	2230	1970
MIN	153	39	53	44	80	42	47	393	717	953	637	439
CFSM	12.9	5.07	4.72	2.05	3.24	2.21	6.29	12.9	20.5	23.1	18.5	15.7
IN.	14.83	5.66	5.44	2.37	3.49	2.55	7.01	14.90	22.86	26.62	21.37	17.56
AC-FT	50040	19120	18360	8010	11760	8600	23650	50280	77170	89840	72130	59260

WTR YR 1980 TOTAL 246144 MEAN 673 MAX 3750 MIN 39 CFSM 10.6 IN 144.65 AC-FT 488200

15020500 EAST FORK BRADFIELD RIVER NEAR WRANGELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT											
17...	1515	432	22	7.1	7.5	11.4	5	0	1.6	.3	.5
APR											
19...	1300	438	22	7.0	--	12.6	6	1	1.9	.2	.6
AUG											
02...	1550	1630	9	6.4	8.0	11.6	8	4	3.0	.1	.4

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT											
17...	.4	9	0	1.2	.2	.0	2.5	11	.05	.020	.26
APR											
19...	.5	6	0	1.0	.4	.0	3.0	11	.10	.220	.12
AUG											
02...	.4	5	0	.2	.1	.1	1.6	8	.00	.030	.84

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT										
17...	.28	.33	.010	--	--	--	--	--	--	--
APR										
19...	.34	.44	.010	2	2.4	--	--	--	--	--
AUG										
02...	.87	.87	.030	34	150	47	58	75	96	100

15022000 HARDING RIVER NEAR WRANGELL

LOCATION.--Lat 56°12'48", long 131°38'12", in SW¼SW¼ sec.22, T.65 S., R.89 E., Hydrologic Unit 19060000, in Tongass National Forest, on right bank 1 mi (1.6 km) upstream from mouth on north shore of Bradfield Canal, 4 mi (6 km) downstream from Fall Lake, and 34 mi (55 km) southeast of Wrangell.

DRAINAGE AREA.--67.4 mi^2 (174.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WSP 1640: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), by barometer. Prior to Sept. 30, 1960, at site 300 ft (90 m) upstream at datum 0.12 ft (0.037 m) lower. Oct. 1, 1960, to Aug. 23, 1975, at prior site and present datum.

REMARKS.--Records good except those for winter periods and period of no gage-height record, June 14 to July 27, which are poor.

AVERAGE DISCHARGE.--29 years, 734 ft^3/s (20.79 m^3/s), 147.89 in/yr (3,756 mm/yr), 531,800 acre-ft/yr (656 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft^3/s (425 m^3/s) Oct. 14, 1961, gage height, 16.22 ft (4.944 m) site then in use, from rating curve extended above 5,000 ft^3/s (140 m^3/s) on basis of slope-area measurement at gage height, 13.90 ft (4.237 m); minimum daily, 35 ft^3/s (0.99 m^3/s) Jan. 23 to Feb. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s (113 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 9	1700	*7,060	200	*11.91	3.630	Aug. 17	0400	4,140	117	9.68	2.950

Minimum daily discharge, 85 ft^3/s (2.41 m^3/s) Jan. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR UCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEH	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	308	211	309	215	524	139	1260	1110	1300	3150	1160
2	1360	263	190	325	370	618	140	1170	793	1400	2560	976
3	1290	226	174	316	380	354	161	725	1020	1540	1560	1060
4	1640	201	184	248	330	251	197	534	1510	1450	2060	1480
5	2060	181	745	215	285	232	237	544	1960	1310	1210	1830
6	1110	162	753	190	365	186	279	742	1830	1180	1110	1100
7	691	148	372	168	490	151	429	920	1590	1070	1060	760
8	505	137	418	148	432	143	363	848	1580	1110	1010	919
9	4390	127	342	139	360	138	286	819	1500	1180	977	1490
10	3710	118	249	132	268	128	267	848	1150	1190	956	914
11	1960	112	226	130	236	118	338	963	1250	1150	1040	677
12	2940	106	184	128	222	110	640	1120	1250	1370	1060	566
13	1500	133	160	126	198	107	535	1270	1880	1580	1060	498
14	921	996	142	120	171	98	466	895	1670	1510	1280	472
15	662	598	131	118	159	92	627	852	1510	1470	1710	555
16	491	468	125	113	148	93	1030	927	1380	1400	2650	851
17	538	607	123	111	138	113	795	970	1220	1250	2970	889
18	447	446	137	105	129	134	649	916	1020	2250	1320	720
19	355	370	185	100	120	153	813	769	1080	2430	1180	1750
20	299	1190	660	93	114	198	617	718	1170	2390	1070	875
21	264	1900	907	85	109	334	495	588	1230	2400	846	648
22	236	1770	478	170	105	533	559	510	1320	2350	683	1890
23	286	760	324	335	104	355	620	512	1300	1750	805	1900
24	352	490	249	315	99	232	471	629	1350	1550	791	1070
25	296	366	252	235	109	188	442	890	1530	1620	678	2480
26	273	299	475	210	205	185	506	1000	1520	1680	787	1280
27	290	246	1780	156	297	194	621	1160	1400	1270	669	1330
28	302	217	1690	151	322	187	616	1160	1150	1330	599	1320
29	698	195	990	175	379	185	603	935	1160	2090	867	2280
30	509	192	558	198	---	155	670	961	1250	2000	934	1810
31	368	---	386	195	---	142	---	1290	---	2470	767	---
TOTAL	32433	13332	13800	5559	6859	6631	14611	27445	40683	50040	39419	35550
MEAN	1046	444	445	179	237	214	487	885	1356	1614	1272	1185
MAX	4390	1900	1780	335	490	618	1030	1290	1960	2470	3150	2480
MIN	236	106	123	85	99	92	139	510	793	1070	599	472
CFSM	15.5	6.59	6.60	2.66	3.52	3.18	7.23	13.1	20.1	23.9	18.9	17.6
IN.	17.90	7.36	7.62	3.07	3.79	3.66	8.06	15.15	22.45	27.62	21.76	19.62
AC-FT	64330	26440	27370	11030	13600	13150	28980	54440	80690	99250	78190	70510

CAL YR 1979 TOTAL 257431 MEAN 705 MAX 4390 MIN 58 CFSM 10.5 IN 142.08 AC-FT 510600
WTR YR 1980 TOTAL 286362 MEAN 782 MAX 4390 MIN 85 CFSM 11.6 IN 158.05 AC-FT 568000

15022000 HARDING RIVER NEAR WRANGELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-72 and 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)
JAN 26...	1345	211	35	6.9	.0	13.4	14	4.5	.6	.9	.6	.8

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JAN 26...	.9	.0	3.7	.12	.030	.35	.38	.50	.010	1	.57

15024750 GOAT CREEK NEAR WRANGELL

LOCATION.--Lat 56°39'40", long 131°58'14", in NE¼NE¼ sec.23, T.60 S., R.85 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 0.4 mi (0.6 km) upstream from mouth and 20 mi (32.2 km) northeast of Wrangell.

DRAINAGE AREA.--17.3 mi^2 (44.8 km^2).

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 35 ft (11 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, Oct. 11 to Mar. 14 and after Sept. 17, which are estimated and poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft^3/s (67.1 m^3/s) Oct. 18, 1978, gage height, 4.55 ft (1.387 m), from rating curve extended above 720 ft^3/s (20 m^3/s); minimum daily, 10 ft^3/s (0.28 m^3/s) Feb. 26-27, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,640 ft^3/s (46.4 m^3/s) Oct. 9 (1830 hrs), gage height, 3.92 ft (1.195 m), from rating curve extended above 720 ft^3/s (20 m^3/s); minimum daily, 19 ft^3/s (0.54 m^3/s) Mar. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	429	74	48	67	46	108	26	326	401	261	665	238
2	362	62	46	55	52	71	24	329	318	294	580	199
3	512	55	45	49	63	58	21	226	340	271	368	176
4	509	49	48	44	68	50	25	170	439	296	366	252
5	535	46	90	41	63	46	26	162	564	322	243	321
6	328	41	165	39	66	41	32	208	636	295	195	236
7	197	38	160	37	72	37	47	256	730	253	179	158
8	153	36	96	36	82	34	50	274	720	223	183	203
9	1230	33	94	35	73	30	45	280	785	206	185	330
10	1160	31	97	33	60	28	44	290	727	218	173	210
11	395	29	60	31	52	25	80	312	587	212	168	141
12	450	28	48	30	45	23	144	335	564	228	167	104
13	205	39	39	29	43	21	120	372	661	242	170	82
14	165	119	33	28	38	19	100	327	506	267	256	76
15	125	168	29	27	36	19	109	310	409	259	296	84
16	119	137	26	26	34	23	183	330	371	261	449	142
17	100	125	30	25	32	27	182	350	345	241	593	151
18	83	96	35	23	30	24	156	332	299	200	321	160
19	75	91	44	22	28	29	158	311	276	254	230	200
20	69	120	195	21	27	31	134	289	279	410	189	150
21	65	260	230	20	25	37	118	226	283	350	155	142
22	61	390	160	22	24	64	135	197	318	395	122	200
23	68	480	84	33	23	54	131	198	347	578	114	290
24	84	160	54	47	22	42	111	237	332	415	107	250
25	75	105	62	48	22	38	113	310	335	318	101	320
26	71	76	80	41	27	37	139	349	353	325	116	300
27	74	62	100	36	41	35	180	377	347	242	105	295
28	82	55	320	35	50	36	196	393	290	236	94	310
29	162	52	220	36	75	34	185	391	248	371	206	380
30	105	49	150	39	---	29	206	391	246	386	214	400
31	84	---	100	44	---	27	---	429	---	520	163	---
TOTAL	8132	3106	2988	1099	1319	1177	3220	9287	13056	9349	7473	6500
MEAN	262	104	96.4	35.5	45.5	38.0	107	300	435	302	241	217
MAX	1230	480	320	67	82	108	206	429	785	578	665	400
MIN	61	28	26	20	22	19	21	162	246	200	94	76
CFSM	15.1	6.01	5.57	2.05	2.63	2.20	6.19	17.3	25.1	17.5	13.9	12.5
IN.	17.49	6.68	6.42	2.36	2.84	2.53	6.92	19.97	28.07	20.10	16.07	13.98
AC-FT	16130	6160	5930	2180	2620	2330	6390	18420	25900	18540	14820	12890

CAL YR 1979 TOTAL 67827 MEAN 186 MAX 1230 MIN 10 CFSM 10.8 IN 145.84 AC-FT 134500
WTR YR 1980 TOTAL 66706 MEAN 182 MAX 1230 MIN 19 CFSM 10.5 IN 143.43 AC-FT 132300

15024800 STIKINE RIVER NEAR WRANGELL
(National stream-quality accounting network station)

LOCATION.--Lat 56°42'07", long 132°08'28", in SE¼NW¼ sec.2, T.60 S., R.84 E., Hydrologic Unit 19060000, on right bank about 10 mi (16 km) upstream from mouth near Point Rothsay, 11 mi (18 km) west of Alaska-British Columbia boundary, and 18 mi (29 km) northeast of Wrangell.

DRAINAGE AREA.--19,920 mi^2 (51,000 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1976 to current year.

REVISED RECORDS.--WDR AK-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (7.6 m), from topographic map.

REMARKS.--Water-discharge records fair except those for Dec. 12 to Apr. 10, which are poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 223,900 ft^3/s (6,340 m^3/s) July 22, 1979, gage height, 25.46 ft (7.760 m); minimum daily, 4,500 ft^3/s (127 m^3/s) Mar. 20 and 21, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 204,900 ft^3/s (5,800 m^3/s), June 10, gage height, 24.55 ft (7.480 m); minimum daily, 6,600 ft^3/s (187 m^3/s) Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69500	22700	13400	9800	8800	7900	8200	36100	120000	142000	170000	76000
2	69200	21000	13300	9600	8000	7800	8200	41800	113000	137000	171000	80000
3	66100	19700	12600	9400	8200	7700	8100	37400	109000	131000	149000	86000
4	96600	18000	13400	9200	8400	7600	8100	32400	120000	136000	145000	86000
5	91500	16100	16400	9000	8500	7500	8400	31100	146000	146000	134000	83000
6	73100	14500	20400	8800	8500	7400	8600	33100	181000	154000	132000	79000
7	53900	15400	16100	8700	8400	7200	8800	40800	198000	153000	139000	75000
8	44000	15600	14800	8600	8700	7000	9300	44800	199000	144000	137000	72000
9	90300	14700	13500	8600	8700	6800	9900	49200	202000	133000	138000	71000
10	187000	13000	12100	8600	8600	6600	10500	52900	203000	129000	138000	77000
11	193000	12500	11500	8500	8400	7500	11400	58600	198000	129000	143000	70400
12	179000	12500	10000	8500	8400	7500	16900	65300	195000	130000	150000	64000
13	169000	12600	10100	8500	8200	7500	19600	75400	200000	134000	151000	58600
14	125000	19100	9800	8500	8000	7400	19100	82500	191000	140000	146000	55100
15	93600	21900	9800	8500	8000	7200	19300	89700	178000	138000	125000	61200
16	74300	21200	9800	8500	7900	7200	21400	93300	170000	133000	120000	80800
17	64100	22100	9800	8600	7800	7300	23400	98100	165000	149000	145000	112000
18	55000	20500	9900	8700	7800	7300	21700	99600	158000	157000	131000	114000
19	48400	18800	10300	8800	7700	7300	22200	93700	152000	153000	121000	108000
20	42900	24300	10000	9000	7700	7400	21500	86100	147000	166000	112000	93400
21	38300	32600	10100	9100	7700	7400	20100	76100	146000	175000	97700	76700
22	34600	44500	10100	9200	7700	7400	20800	67100	129000	180000	90000	78100
23	33300	33400	10100	9300	7700	7400	23800	61900	123000	188000	81700	82100
24	33400	25800	10100	9300	7700	7300	21900	61200	121000	186000	78000	74800
25	31700	21900	10100	9100	7700	7400	21000	67700	123000	190000	78000	77300
26	29900	19400	10100	8800	7700	7500	21800	78800	137000	191000	80000	78900
27	28000	16100	10100	8600	7900	7600	24600	94500	149000	174000	81000	75600
28	26600	13900	10100	8200	7900	7700	27300	104000	145000	156000	81000	81200
29	27700	14200	10100	8200	7900	7900	28000	110000	134000	151000	79000	92200
30	25700	13900	10100	8100	---	8400	28500	116000	135000	144000	76000	103000
31	24000	---	10000	8100	---	8700	---	118000	---	149000	75000	---
TOTAL	2218700	591900	358000	272400	234600	231800	522400	2197200	4687000	4718000	3694400	2422400
MEAN	71570	19730	11550	8787	8090	7477	17410	70880	156200	152200	119200	80750
MAX	193000	44500	20400	9800	8800	8700	28500	118000	203000	191000	171000	114000
MIN	24000	12500	9800	8100	7700	6600	8100	31100	109000	129000	75000	55100
CFSM	3.59	.99	.58	.44	.41	.38	.87	3.56	7.84	7.64	5.98	4.05
IN.	4.14	1.11	.67	.51	.44	.43	.98	4.10	8.75	8.81	6.90	4.52
AC-FT	4401000	1174000	710100	540300	465300	459800	1036000	4358000	9297000	9358000	7328000	4805000

CAL YR 1979 TOTAL 20662600 MEAN 56610 MAX 213000 MIN 5600 CFSM 2.84 IN 38.59 AC-FT 40980000
WTR YR 1980 TOTAL 22148800 MEAN 60520 MAX 203000 MIN 6600 CFSM 3.04 IN 41.36 AC-FT 43930000

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1976 to current year.

INSTRUMENTATION.--Temperature recorder since July 27, 1976.

REMARKS.--Records are good and represent water temperature at sensor within 0.5°C. Temperature at sensor was compared with the average for the river by temperature cross sections on Oct. 7, Nov. 6, Mar. 14, May 15, July 10, and Sept. 10. A maximum variation of 1.0°C was found within the cross sections. No record July 13 to Sept. 10.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 11.0°C June 3, 12, and July 10, 1978; minimum, 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 10.0°C June 30 and July 9 and 5; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)
MAY					
15...	1501	350	138	7.9	6.8
15...	1502	600	130	7.9	6.8
15...	1503	850	127	8.1	6.8
15...	1504	1050	128	8.2	6.9
15...	1505	1250	110	8.1	7.0
JUL					
10...	0946	350	102	8.4	7.5
10...	0947	600	107	8.5	10.0
10...	0948	850	107	8.3	10.0
10...	0949	1050	109	8.3	10.8
10...	0950	1250	103	8.3	9.9

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 07...	1600	--	54900	128	8.2	5.0	33	11.6	--	K11	54
NOV 06...	1300	--	13000	200	7.6	.0	7.4	10.8	E1	E1	70
MAR 14...	1430	--	6180	240	7.9	.5	2.3	11.6	--	--	100
MAY 15...	1500	1300	93600	127	8.1	7.0	110	12.0	K72	--	47
JUL 10...	0945	1300	129000	106	8.3	9.5	88	11.2	K15	K503	42
SEP 10...	1500	--	77800	--	7.2	6.5	41	11.4	15	34	47

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 07...	6	17	2.7	1.8	1.0	58	14	.9	.1	6.3	89
NOV 06...	7	22	3.6	3.5	1.2	77	17	2.7	.1	5.5	97
MAR 14...	20	32	5.4	6.1	1.2	97	26	7.0	.1	7.2	144
MAY 15...	4	15	2.4	1.7	.7	56	6.3	.5	.1	4.3	60
JUL 10...	0	14	1.8	1.3	.7	53	7.5	.0	.2	3.4	56
SEP 10...	--	15	2.4	1.6	.8	--	12	1.6	.1	4.1	69

K NON-IDEAL COLONY COUNT

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
OCT 07...	76	.10	.10	.030	.010	.45	.43	.48	.04	.44	.58
NOV 06...	94	.09	.06	.040	.000	.35	.40	.39	.00	.40	.48
MAR 14...	134	.13	.18	.000	.000	.31	1.5	.31	.00	1.5	.44
MAY 15...	57	.08	.09	.000	.010	.46	1.4	.46	.00	1.4	.54
JUL 10...	55	.00	.01	.060	.000	.39	.46	.45	.00	.46	.45
SEP 10...	--	.00	.00	.000	.000	.44	.83	.44	.00	.83	.44

DATE	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)
OCT 07...	.54	.060	.010	.951	1.10	.000	.000	1.5	2.3	.0	2
NOV 06...	.46	.070	.010	--	--	--	--	5.2	--	--	--
MAR 14...	1.7	.020	.010	--	--	--	--	--	3.6	3.9	0
MAY 15...	1.5	.350	.010	--	--	--	--	--	--	3.0	4
JUL 10...	.47	.190	.010	--	--	--	--	--	4.2	1.2	3
SEP 10...	.83	.120	.100	--	--	--	--	--	3.5	.5	2

DATE	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 07...	1	1	0	0	50	0	0	<1	10	10	0
NOV 06...	--	--	--	--	--	--	--	--	--	--	--
MAR 14...	0	0	100	40	60	2	1	<1	0	0	0
MAY 15...	2	2	200	200	30	0	0	1	20	20	0
JUL 10...	2	1	100	60	40	2	0	2	10	0	10
SEP 10...	2	0	100	70	30	1	--	<1	20	20	0

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)
OCT 07...	0	0	<3	20	14	6	3400	--	860	46	32
NOV 06...	--	--	--	--	--	--	--	--	--	--	--
MAR 14...	0	0	<3	3	1	2	450	390	60	22	22
MAY 15...	12	12	0	40	33	7	9500	9400	90	40	36
JUL 10...	5	--	<3	26	22	4	9000	8900	140	13	11
SEP 10...	4	--	<3	28	23	5	5800	5700	80	7	6

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1981

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT 07...	14	100	70	30	.3	.2	.1	4	4	0	0
NOV 06...	--	--	--	--	--	--	--	--	--	--	--
MAR 14...	0	50	10	40	.1	.0	.2	2	2	0	0
MAY 15...	4	470	460	10	.2	[illegible]	.0	37	31	6	1
JUL 10...	2	230	220	9	.2	.2	.0	15	15	0	0
SEP 10...	1	150	140	9	.5	.5	.0	14	13	1	0

DATE	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 07...	0	0	0	0	0	20	10	10	92	13600
NOV 06...	--	--	--	--	--	--	--	--	47	1650
MAR 14...	0	0	0	0	0	10	7	<3	1	17
MAY 15...	1	0	0	0	0	70	50	20	729	184000
JUL 10...	0	0	0	0	0	60	50	10	217	75600
SEP 10...	0	0	0	0	0	50	50	5	178	37400

DATE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT 07...	--	--	--	--	--	64	--	--	--	--
NOV 06...	--	--	--	--	--	--	--	--	--	--
MAR 14...	--	--	--	--	--	--	--	--	--	--
MAY 15...	--	18	24	31	40	*52	*61	*85	*100	--
JUL 10...	31	37	47	57	67	72	85	88	100	--
SEP 10...	21	27	34	40	46	52	65	85	98	100

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
MAY 15...	52	61	85	100

* FIELD DIAMETER

15024800 STIKINE RIVER NEAR WRANGELL--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	OCT 7,79 1600	NOV 6,79 1300	MAR 14,80 1430	MAY 15,80 1500	JUL 10,80 0945	SEP 10,80 1500
TOTAL CELLS/ML	30	56	140	430	28	2200
DIVERSITY: DIVISION	0.7	0.0	0.2	0.9	1.0	0.1
.CLASS	0.7	0.0	0.2	0.9	1.0	0.1
..ORDER	0.7	0.0	0.2	0.9	1.0	0.1
...FAMILY	2.3	1.8	0.2	1.4	1.0	0.5
....GENUS	2.3	1.8	0.2	1.4	1.0	0.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....CHLOROCOCCUM	5#	17	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	14#	50	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	5#	17	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE												
....RHOPALODIA	--	-	5	9	--	-	--	-	--	-	--	-
...DIATOMACEAE												
....DIATOMA	--	-	10#	18	--	-	--	-	--	-	--	-
...FUNOTIACEAE												
....EUNOTIA	--	-	--	-	--	-	58	13	--	-	--	-
...FRAGILARIACEAE												
....FRAGILARIA	--	-	--	-	--	-	58	13	--	-	--	-
....SYNEDRA	10#	33	--	-	--	-	--	-	--	-	13	1
...GOMPHONEMATACEAE												
....GOMPHONEMA	5#	17	15#	27	--	-	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	5#	17	25#	45	5	4	--	-	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	--	-	--	-	--	-	29	7	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	14#	50	--	-
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENOPSIS	--	-	--	-	--	-	--	-	--	-	210	10
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	--	-	290#	67	--	-	1900#	90
....SCHIZOTHRIX	--	-	--	-	140#	96	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

15024800 STIKINE RIVER NEAR WRANGELL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.0	5.0	5.0	4.0	3.5	3.5	1.0	1.0	1.0	.5	.5	.5
2	5.0	4.5	4.5	3.5	3.0	3.0	1.0	1.0	1.0	.5	.5	.5
3	4.5	4.5	4.5	2.5	1.5	2.0	1.0	.5	.5	.5	.5	.5
4	4.5	4.0	4.5	1.5	1.0	1.0	1.0	.5	.5	.5	.5	.5
5	5.0	4.5	4.5	1.0	.5	1.0	1.0	1.0	1.0	.5	.5	.5
6	5.0	4.5	5.0	.5	.0	.5	1.0	1.0	1.0	.5	.5	.5
7	5.0	4.5	5.0	.5	.0	.0	1.0	.5	1.0	.5	.5	.5
8	5.0	4.5	5.0	.5	.0	.0	.5	.5	.5	.5	.5	.5
9	6.0	4.5	5.5	.5	.5	.5	1.0	.5	.5	.5	.5	.5
10	5.5	5.0	5.5	.5	.5	.5	1.0	.5	.5	.5	.5	.5
11	5.0	4.0	5.0	.5	.5	.5	1.0	.5	.5	.5	.5	.5
12	5.0	4.0	5.0	.5	.5	.5	1.5	.5	1.0	.5	.5	.5
13	5.0	4.5	4.5	.5	.5	.5	.5	.0	.5	.5	.5	.5
14	4.5	4.5	4.5	1.0	.5	.5	.5	.5	.5	.5	.5	.5
15	4.5	4.0	4.5	1.5	1.0	1.0	.5	.5	.5	.5	.5	.5
16	4.0	4.0	3.5	1.5	1.5	1.5	.5	.5	.5	.5	.5	.5
17	4.0	4.0	4.0	1.5	1.5	1.5	.5	.5	.5	.5	.5	.5
18	4.0	4.0	3.5	1.5	1.5	1.5	.5	.5	.5	.5	.5	.5
19	4.0	3.5	3.5	1.5	1.5	1.5	.5	.0	.5	.5	.5	.5
20	3.5	3.0	3.5	2.0	1.5	2.0	.0	.0	.0	.5	.5	.5
21	3.5	3.0	3.0	2.5	2.0	2.5	.0	.0	.0	.5	.5	.5
22	3.5	3.5	3.5	2.5	2.0	2.5	.0	.0	.0	.5	.5	.5
23	3.5	3.5	3.5	2.0	2.0	2.0	.0	.0	.0	.5	.0	.5
24	4.0	3.5	4.0	2.0	1.0	2.0	.0	.0	.0	.5	.5	.5
25	4.0	3.5	3.5	2.0	1.5	1.5	.0	.0	.0	.5	.5	.5
26	3.5	3.0	3.5	1.5	1.0	1.5	.0	.0	.0	.5	.5	.5
27	3.5	3.5	3.5	1.0	.5	1.0	.0	.0	.0	.5	.5	.5
28	3.5	3.5	3.5	.5	.5	.5	.0	.0	.0	.5	.5	.5
29	3.5	3.5	3.5	.5	.5	.5	.0	.0	.0	.5	.5	.5
30	3.5	3.5	3.5	.5	.5	.5	.0	.0	.0	.5	.5	.5
31	4.0	3.5	3.5	---	---	---	.5	.0	.5	.5	.5	.5
MONTH	6.0	3.0	4.0	4.0	.0	1.5	1.5	.0	.5	.5	.0	.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	.5	.5	.5	1.0	.5	1.0	3.0	2.5	3.0
2	.5	.5	.5	.5	.5	.5	1.0	.5	.5	3.0	2.5	2.5
3	.5	.5	.5	.5	.5	.5	1.0	.5	.5	4.5	3.0	3.5
4	.5	.5	.5	.5	.5	.5	1.0	.5	.5	5.0	4.0	4.5
5	.5	.5	.5	.5	.5	.5	1.0	.5	1.0	5.0	4.5	4.5
6	.5	.5	.5	.5	.5	.5	1.0	.5	1.0	4.5	4.0	4.5
7	.5	.5	.5	.5	.5	.5	1.5	1.0	1.0	4.0	3.5	4.0
8	.5	.5	.5	.5	.5	.5	2.0	1.0	1.5	5.0	4.0	4.0
9	.5	.5	.5	.5	.5	.5	1.5	.5	1.0	5.5	4.0	5.0
10	.5	.5	.5	.5	.5	.5	1.5	.5	.5	6.0	4.5	5.0
11	.5	.5	.5	.5	.5	.5	1.5	.5	1.0	6.5	4.5	5.5
12	.5	.5	.5	.5	.5	.5	1.5	1.0	1.0	6.5	5.0	5.5
13	.5	.5	.5	.5	.5	.5	2.0	.5	1.0	6.0	5.5	5.5
14	.5	.5	.5	.5	.5	.5	1.5	1.0	1.5	6.5	5.0	6.0
15	.5	.5	.5	.5	.5	.5	1.5	1.0	1.5	7.0	5.5	6.5
16	.5	.5	.5	.5	.5	.5	1.5	1.0	1.5	6.5	6.0	6.5
17	.5	.5	.5	.5	.5	.5	1.5	1.0	1.5	6.5	6.0	6.0
18	.5	.5	.5	.5	.5	.5	1.5	1.5	1.5	6.5	6.0	6.0
19	.5	.5	.5	.5	.5	.5	2.0	1.0	1.5	6.0	6.0	6.0
20	.5	.5	.5	.5	.5	.5	2.0	1.5	1.5	6.5	5.5	6.0
21	.5	.5	.5	.5	.5	.5	2.0	1.5	2.0	7.0	6.0	6.5
22	.5	.5	.5	.5	.5	.5	2.0	2.0	2.0	8.0	6.0	7.0
23	.5	.5	.5	.5	.5	.5	3.0	1.5	2.0	8.5	7.0	7.5
24	.5	.5	.5	.5	.5	.5	3.5	2.5	3.0	8.5	7.5	8.0
25	.5	.5	.5	.5	.5	.5	4.0	3.0	3.5	8.5	7.5	8.0
26	.5	.5	.5	.5	.5	.5	4.0	3.0	3.5	8.5	7.0	7.5
27	.5	.5	.5	.5	.5	.5	3.5	3.0	3.5	8.5	7.5	8.0
28	.5	.5	.5	.5	.5	.5	4.0	3.0	3.5	8.0	7.5	7.5
29	.5	.5	.5	1.0	.5	.5	4.0	3.0	3.5	9.0	7.5	8.0
30	---	---	---	.5	.5	.5	4.0	3.5	3.5	8.5	7.5	8.0
31	---	---	---	1.0	.5	.5	---	---	---	8.0	7.0	7.5
MONTH	.5	.5	.5	1.0	.5	.5	4.0	.5	1.5	9.0	2.5	6.0

15024800 STIKINE RIVER NEAR WRANGELL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.5	7.5	7.5	9.5	7.5	8.5				---	---	---
2	8.5	7.0	7.5	8.5	7.5	8.0				---	---	---
3	8.5	7.5	8.0	9.5	8.0	8.5				---	---	---
4	9.0	7.5	8.0	10.0	8.5	9.5				---	---	---
5	9.5	8.0	9.0	10.0	9.0	9.0				---	---	---
6	9.0	8.5	9.0	9.5	8.5	9.0				---	---	---
7	8.5	8.0	8.5	9.0	8.5	8.5				---	---	---
8	9.0	7.5	8.0	8.5	8.0	8.0				---	---	---
9	8.5	8.0	8.5	8.5	7.5	8.0				---	---	---
10	9.0	8.5	9.0	9.5	8.0	8.5				---	---	---
11	9.0	8.5	8.5	9.5	8.5	9.0				7.0	6.5	7.0
12	8.5	8.0	8.5	9.5	9.0	9.0				7.0	6.5	6.5
13	8.0	7.0	7.5	---	---	---				6.5	6.5	6.5
14	7.0	6.5	7.0	---	---	---				7.0	6.5	6.5
15	7.5	6.5	7.0	---	---	---				7.0	6.5	7.0
16	7.5	6.5	7.0	---	---	---				8.0	7.0	7.5
17	8.0	7.0	7.5	---	---	---				8.0	7.0	7.5
18	8.5	8.0	8.0	---	---	---				7.0	6.0	6.5
19	9.0	8.0	8.5	---	---	---				6.0	5.5	6.0
20	9.0	8.0	8.5	---	---	---				6.0	5.5	6.0
21	8.5	7.5	8.0	---	---	---				6.0	5.5	6.0
22	7.5	7.0	7.5	---	---	---				6.0	5.5	5.5
23	8.5	7.0	7.5	---	---	---				6.0	5.5	5.5
24	9.0	7.5	8.5	---	---	---				5.5	5.5	5.5
25	8.5	8.0	8.5	---	---	---				6.0	5.5	5.5
26	9.0	8.0	8.5	---	---	---				6.0	5.5	6.0
27	8.5	8.5	8.5	---	---	---				5.5	5.5	5.5
28	8.5	8.0	8.0	---	---	---				5.5	5.0	5.0
29	8.0	8.0	8.0	---	---	---				5.0	4.5	5.0
30	10.0	8.0	9.0	---	---	---				5.0	4.5	5.0
31	---	---	---	---	---	---				---	---	---
MONTH	10.0	6.5	8.0									

15028300 FARRAGUT RIVER NEAR PETERSBURG

LOCATION.--Lat 57°10'24", long 133°06'36", in NE¼SW¼ sec.24, T.54 S., R.77 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 2.2 mi (3.6 km) upstream from mouth and 26 mi (42 km) northwest of Petersburg.

DRAINAGE AREA.--151 mi^2 (391 km^2).

PERIOD OF RECORD.--June 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (7.6 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,400 ft^3/s (464 m^3/s) Oct. 9, 1979, gage height, 15.23 ft (4.642 m), from rating curve extended above 8,500 ft^3/s (240 m^3/s); minimum daily, 95 ft^3/s (2.69 m^3/s) Feb. 22, 23, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,400 ft^3/s (464 m^3/s) Oct. 9, gage height, 15.23 ft (4.642 m), from rating curve extended above 8,500 ft^3/s (240 m^3/s); minimum, 140 ft^3/s (3.96 m^3/s) Nov. 13, gage height, 3.26 ft (0.994 m).

REVISIONS.--The maximum discharges for the period, June to September 1977, and for water year 1978 have been revised to 8,280 ft^3/s (234 m^3/s) Sept. 12, 1977, gage height, 11.14 ft (3.395 m) and 6,330 ft^3/s (179 m^3/s) Oct. 15, 1977, gage height, 9.90 ft (3.018 m). Revised daily discharges, in cubic feet per second, for Sept. 12 and Oct. 15, 1977 are given below. These figures supersede those published in the report for 1978.

Sept.12, 1977...	6,000	Oct. 15, 1977...	5,630

Month	Cfs-day	Mean	Maximum	Minimum	Per Square mile	Runoff in Inches	Runoff in Acre-feet
September 1977	63,509	2,117	6,000	909	14.0	15.65	126,000
October 1977	63,156	2,037	5,630	552	13.5	15.56	125,300
WTR YR 1978	463,996	1,271	5,630	155	8.42	114.31	920,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4140	903	861	620	404	930	270	2690	1820	2090	6300	1890
2	3430	675	537	605	691	1150	295	1900	1590	2130	4780	1670
3	7200	530	444	590	711	670	330	1310	1850	2090	3830	1800
4	5540	443	418	445	572	520	372	1020	2360	2250	3760	2380
5	5920	376	1030	400	439	410	430	1040	3310	2310	2900	2040
6	3280	317	975	350	684	340	605	1260	3490	2210	2670	1940
7	2230	274	742	310	1020	305	840	1320	3600	2030	2490	1410
8	1720	240	844	280	738	286	665	1440	3640	1910	2780	1870
9	11800	211	611	260	628	268	505	1300	3330	1900	2890	2800
10	8940	190	540	250	582	250	560	1390	2950	2100	2600	2270
11	7240	169	492	245	509	235	820	1430	2870	1950	2790	1700
12	7670	152	345	240	395	215	1130	1510	3110	1950	3030	1340
13	4860	348	306	235	379	205	1020	1580	5620	2250	3550	1120
14	3520	2530	267	230	318	191	950	1380	4650	3460	3730	1170
15	2430	2080	246	226	293	185	1320	1380	3870	3220	3210	1400
16	1710	1820	238	220	276	200	1980	1470	3310	2490	5420	2480
17	1630	1990	232	210	277	222	1600	1700	2870	2510	7260	2670
18	1200	1290	255	198	259	263	1310	1470	2270	2650	3940	2310
19	941	1600	300	188	195	308	1450	1490	2000	3630	3140	2560
20	764	3190	460	169	192	450	997	1330	1870	4000	2920	1870
21	630	3270	1810	154	188	600	1000	1050	1870	3950	2470	1520
22	531	3000	950	439	181	1480	1920	948	2810	4700	2000	2720
23	614	1900	670	710	180	590	1410	937	2500	4580	1830	2950
24	720	1270	505	573	179	425	1040	1110	2310	3900	1620	2540
25	550	1030	508	413	205	380	907	1270	2440	3210	1520	3530
26	531	873	850	315	290	370	963	1280	2500	3410	1400	2150
27	614	696	2000	268	420	380	1080	1520	2520	2860	1300	2500
28	589	583	2750	279	630	365	1240	1560	2160	2940	1360	2360
29	1480	519	1400	347	750	345	1010	1430	2030	4140	2620	3660
30	1140	578	1050	375	---	315	1630	1470	2030	3970	1840	3630
31	855	---	860	335	---	280	---	2240	---	4760	1650	---
TOTAL	94419	33047	23496	10479	12585	13133	29649	44225	83550	91550	93600	66250
MEAN	3046	1102	758	338	434	424	988	1427	2785	2953	3019	2208
MAX	11800	3270	2750	710	1020	1480	1980	2690	5620	4760	7260	3660
MIN	531	152	232	154	179	185	270	937	1590	1900	1300	1120
CFSM	20.2	7.30	5.02	2.24	2.87	2.81	6.54	9.45	18.4	19.6	20.0	14.6
IN.	23.26	8.14	5.79	2.58	3.10	3.24	7.30	10.90	20.58	22.55	23.06	16.32
AC-FT	187300	65550	46600	20790	24960	26050	58810	87720	165700	181600	185700	131400

CAL YR 1979 TOTAL 634459 MEAN 1738 MAX 11800 MIN 95 CFSM 11.5 IN 156.30 AC-FT 1258000
WTR YR 1980 TOTAL 595983 MEAN 1628 MAX 11800 MIN 152 CFSM 10.8 IN 146.82 AC-FT 1182000

NOTE.--No gage-height record Dec. 17 to Jan. 18 and Feb. 19 to Apr. 4.

15050000 GOLD CREEK AT JUNEAU

LOCATION.--Lat 58°18'25", long 134°24'05", City and Borough of Juneau, Hydrologic Unit 19060000, on left bank 10 ft (3 m) downstream from highway bridge, 150 ft (46 m) upstream from Alaska Electric Light and Power Company dam and diversion, 0.5 mi (0.8 km) northeast of Juneau, and 1 mi (1.6 km) upstream from mouth at Gastineau Channel.

DRAINAGE AREA.--9.76 mi^2 (25.28 km^2).

PERIOD OF RECORD.--July 1916 to December 1920 (monthly discharge only), October 1946 to September 1948, October 1949 to current year.

REVISED RECORDS.--WSP 1372: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 245 ft (74.7 m), from topographic map. July 20, 1916 to Dec. 31, 1920, at site 50 ft (15 m) upstream at different datum. Sept. 11, 1946 to Sept. 30, 1948, nonrecording gage at site 0.7 mi (1.1 km) downstream at different datum.

REMARKS.--Records fair except those for January, which are poor.

AVERAGE DISCHARGE.--37 years, 108 ft^3/s (3.06 m^3/s), 150.27 in/yr (3,817 mm/yr), 78,250 acre-ft/yr (96.5 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,650 ft^3/s (75.0 m^3/s) Aug. 12, 1961, gage height, 6.57 ft (2.003 m), from rating curve extended above 1,800 ft^3/s (51 m^3/s); no flow at times during winters of 1951, 1956 and 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s (25.5 m^3/s) and maximum (*).

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 4	2245	1,550	43.9	4.79	1.460	Aug. 3	1630	1,050	29.7	4.68	1.426
Oct. 9	0830	1,540	43.6	4.82	1.469	Sept.24	1930	1,420	40.2	5.36	1.634
July 30	2000	*1,960	55.5	*6.03	1.838						

Minimum daily discharge, 7.2 ft^3/s (0.20 m^3/s) Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	68	44	22	16	37	15	138	160	113	922	115
2	293	50	39	20	22	24	16	115	135	112	616	90
3	805	44	36	19	26	20	16	75	163	108	618	296
4	647	40	36	17	20	18	17	68	248	120	428	205
5	568	37	57	16	18	17	19	93	360	126	272	130
6	343	34	45	15	22	16	20	100	374	133	207	104
7	215	32	34	14	63	16	21	118	366	115	173	95
8	469	31	35	13	32	16	21	128	356	106	282	353
9	831	29	32	12	25	15	22	122	298	121	197	306
10	390	27	30	11	22	15	22	119	232	97	146	158
11	546	26	29	9.7	28	14	52	121	196	88	149	109
12	368	26	28	9.2	19	13	80	126	297	144	138	80
13	264	41	27	9.0	19	11	53	130	595	282	242	68
14	186	383	26	9.1	18	9.5	43	123	583	261	116	71
15	128	270	25	9.4	17	8.3	40	121	447	162	94	77
16	111	168	25	9.8	17	8.6	45	132	307	177	526	116
17	106	143	24	10	16	8.0	50	185	212	170	437	71
18	79	88	36	11	15	8.0	52	155	165	121	207	69
19	65	155	70	12	15	7.7	60	139	150	355	230	69
20	58	337	117	12	15	7.2	48	126	140	468	197	56
21	51	369	87	13	15	26	51	100	162	275	139	72
22	47	317	55	14	15	33	62	84	457	200	106	298
23	65	144	45	15	15	20	52	80	294	508	89	224
24	67	91	38	16	15	13	45	93	217	352	75	591
25	51	71	45	16	15	11	47	130	202	189	73	327
26	47	59	38	16	16	10	60	156	200	174	63	162
27	47	50	34	16	18	16	90	179	186	137	54	182
28	42	46	32	15	19	17	95	172	146	176	70	167
29	54	44	27	15	22	17	76	142	121	362	68	240
30	78	44	25	15	---	16	101	155	109	1130	54	412
31	78	---	24	16	---	16	---	266	---	1070	71	---
TOTAL	7405	3264	1245	427.2	587	484.3	1391	3991	7878	7952	7059	5313
MEAN	239	109	40.2	13.8	20.2	15.6	46.4	129	263	257	228	177
MAX	831	383	117	22	63	37	101	266	595	1130	922	591
MIN	42	26	24	9.0	15	7.2	15	68	109	88	54	56
CFSM	24.5	11.2	4.12	1.41	2.07	1.60	4.75	13.2	26.9	26.3	23.4	18.1
IN.	28.22	12.44	4.74	1.63	2.24	1.85	5.30	15.21	30.02	30.31	26.90	20.25
AC-FT	14690	6470	2470	847	1160	961	2760	7920	15630	15770	14000	10540

CAL YR 1979 TOTAL 43296.2 MEAN 119 MAX 980 MIN 1.2 CFSM 12.2 IN 165.01 AC-FT 85880
WTR YR 1980 TOTAL 46996.5 MEAN 128 MAX 1130 MIN 7.2 CFSM 13.1 IN 179.11 AC-FT 93220

15052500 MENDENHALL RIVER NEAR AUKE BAY

LOCATION.--Lat 58°25'05", long 134°32'40", in SW¼NE¼ sec.8, T.40 S., R.66 E., City and Borough of Juneau, Hydrologic Unit 19060000, at east end of Mendenhall Lake, 250 ft (76 m) northwest of Mendenhall Visitors Center, 4.2 mi (6.8 km) northeast of Auke Bay, and 7 mi (11 km) upstream from mouth at Fritz Cove.

DRAINAGE AREA.--85.1 mi^2 (220.4 km^2).

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 60 ft (18 m), from topographic map.

REMARKS.--Records good. Streamflow is augmented and diurnal fluctuations are caused by meltage from Mendenhall Glacier that covers two-thirds of the basin.

AVERAGE DISCHARGE.--15 years, 1,114 ft^3/s (31.55 m^3/s), 177.77 in/yr (4.515 mm/yr), 807,100 acre-ft/yr (995 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,820 ft^3/s (278 m^3/s) Sept. 28, 1976, gage height, 8.67 ft (2.643 m); maximum gage height, 8.94 ft (2.725 m) Aug. 24, 1966; minimum daily discharge, 19 ft^3/s (0.54 m^3/s) Mar. 1-3, 1969 and Mar. 7-11, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,600 ft^3/s (130 m^3/s) and maximum (*).

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 5	0615	4,910	139	6.71	2.045	July 31	0215	*9,790	277	*8.77	2.673
Oct. 12	0615	7,440	211	7.88	2.402	Aug. 13	2030	5,710	162	7.11	2.167
July 23	2345	5,080	144	6.80	2.073	Aug. 17	2245	7,400	210	7.86	2.396

Minimum daily discharge, 53 ft^3/s (1.50 m^3/s) Jan. 19 & 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	498	218	110	79	98	62	269	1030	1770	8440	1970
2	2030	389	203	106	82	101	62	327	914	1920	5730	2020
3	3780	294	185	102	102	96	59	289	1080	1980	5290	2510
4	4320	240	172	92	103	88	64	257	1350	2170	4710	2700
5	4340	208	240	84	100	81	71	273	1900	2240	3530	1730
6	2620	192	258	80	103	77	71	331	2230	2320	3450	1350
7	1360	176	220	74	158	74	79	384	2460	2100	3280	1090
8	1040	166	203	70	179	74	85	391	3110	1840	3850	1320
9	4220	160	187	66	166	76	89	454	3280	2180	4500	2070
10	6780	154	174	64	152	71	90	499	2660	2190	3600	2320
11	6140	150	163	60	141	67	105	496	2140	1860	4000	2050
12	6780	145	140	58	131	63	156	506	2140	2030	4590	1420
13	4380	168	126	58	121	61	178	538	3230	2650	5250	1280
14	2650	398	115	57	111	59	179	528	3550	3000	4150	1130
15	1730	886	108	58	102	57	175	513	3050	2580	3020	1180
16	1230	1040	102	57	92	56	166	548	2630	2470	4030	1670
17	1060	996	103	56	84	57	174	598	2270	2960	6800	2040
18	908	784	111	54	78	58	170	625	1990	2490	6290	2000
19	751	556	131	53	73	56	177	575	1860	2950	5970	1810
20	617	901	169	53	67	56	169	567	1770	3910	3970	1330
21	514	952	209	54	64	60	160	618	1660	3980	3220	970
22	444	1380	189	74	64	67	185	584	2270	3600	2450	1250
23	459	952	164	122	62	69	187	504	2540	4220	2230	1930
24	508	682	150	125	62	66	180	538	2130	4540	2100	2510
25	529	478	147	113	61	64	176	620	2170	3500	2030	3740
26	503	359	155	101	62	61	185	664	2230	3440	1910	2870
27	464	294	151	95	65	63	208	818	2130	3380	1840	2690
28	435	258	155	89	68	65	220	847	1960	3630	1780	3060
29	403	234	143	84	75	67	221	766	1790	5120	1600	2820
30	449	223	128	79	---	66	222	762	1750	7280	1410	3020
31	483	---	115	79	---	64	---	1020	---	9310	1520	---
TOTAL	63457	14313	5034	2427	2807	2138	4325	16709	65274	99610	116540	59850
MEAN	2047	477	162	78.3	96.8	69.0	144	539	2176	3213	3759	1995
MAX	6780	1380	258	125	179	101	222	1020	3550	9310	8440	3740
MIN	403	145	102	53	61	56	59	257	914	1770	1410	970
CFSM	24.1	5.61	1.90	.92	1.14	.81	1.69	6.33	25.6	37.8	44.2	23.4
IN.	27.74	6.26	2.20	1.06	1.23	.93	1.89	7.30	28.53	43.54	50.94	26.16
AC-FT	125900	28390	9980	4810	5570	4240	8580	33140	129500	197600	231200	118700

CAL YR 1979 TOTAL 438201 MEAN 1201 MAX 7210 MIN 20 CFSM 14.1 IN 191.55 AC-FT 869200
WTR YR 1980 TOTAL 452484 MEAN 1236 MAX 9310 MIN 53 CFSM 14.5 IN 197.79 AC-FT 897500

15056100 SKAGWAY RIVER AT SKAGWAY
(National stream-quality accounting network station)

LOCATION.--Lat 59°28'01", long 135°18'03", Hydrologic Unit 19060000, on left bank 800 ft (240 m) downstream from highway bridge, on dike near end of 20th Street in City of Skagway, and 1 mi (1.6 km) upstream from mouth at Taiya Inlet.

DRAINAGE AREA.--145 mi^2 (376 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6.1 m), from topographic map. Prior to Mar. 3, 1976, at site 0.85 mi (1.4 km) downstream at different datum.

REMARKS.--Records fair except those for period of no gage-height record, July 20 to Aug. 21, which are poor. Streamflow is augmented and large diurnal fluctuations are caused by meltage from glaciers that cover 17 percent of the basin.

AVERAGE DISCHARGE.--17 years, 547 ft^3/s (15.49 m^3/s), 51.23 in/yr (1,301 mm/yr), 396,300 acre-ft/yr (489 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s (385 m^3/s) Sept. 15, 1967, gage height, 8.50 ft (2.519 m), site and datum then in use, from rating curve extended above 4,000 ft^3/s (113 m^3/s) on basis of a contracted opening measurement of peak flow; minimum daily, 6.0 ft^3/s (0.17 m^3/s) Mar. 31, 1974.

EXTREMES FOR CURRENT PERIOD.--Peak discharges above base of 3,000 ft^3/s (85 m^3/s) and maximum(*).

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 9	1745	*7,190	204	*17.47	5.325	June 8	2145	5,060	143	16.80	5.121
June 6	1945	5,260	149	16.87	5.142						

Minimum daily discharge, 27 ft^3/s (0.76 m^3/s), Mar. 24 and 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	675	111	91	81	41	49	34	280	816	1320	2100	279
2	637	88	80	123	41	36	36	281	804	1540	2300	290
3	2040	92	55	140	45	41	39	242	1310	2000	2080	299
4	1440	81	71	112	42	46	46	236	2500	2050	1900	270
5	1700	65	66	80	42	50	54	288	4290	2180	1700	201
6	877	61	53	71	45	52	59	362	5380	2320	1600	181
7	602	80	44	68	77	51	54	375	5140	1740	1410	171
8	486	68	45	63	67	44	53	398	4970	1580	1280	204
9	4820	67	38	60	53	42	72	424	4020	1680	1200	298
10	4210	67	43	57	49	40	100	494	3650	1500	1180	247
11	2340	63	47	52	46	36	157	558	3020	1430	1100	211
12	2230	61	57	47	43	36	251	596	2630	1750	1030	183
13	1200	65	73	47	44	36	187	692	1910	1840	1100	174
14	837	122	188	41	44	33	149	819	1490	1830	1120	193
15	633	379	214	39	39	36	132	744	1570	1680	950	416
16	367	260	143	47	37	39	134	665	1610	1570	1000	1250
17	318	218	108	50	36	39	138	646	1580	1310	1200	690
18	263	159	110	46	40	36	140	595	1310	1190	1150	361
19	222	142	115	43	45	35	163	509	1250	1310	850	287
20	196	574	88	43	46	33	163	435	1230	1500	600	233
21	169	454	88	39	48	33	163	383	1130	1650	524	211
22	161	649	81	57	50	30	177	386	1000	1850	390	211
23	160	312	73	82	50	29	151	442	1020	1580	498	252
24	199	218	68	53	49	27	139	581	1470	1590	465	283
25	220	161	70	42	49	27	138	857	1880	1520	398	392
26	182	140	74	41	50	29	180	1110	2080	1340	339	364
27	180	118	74	46	52	31	209	1340	1990	1350	255	395
28	176	108	75	48	52	32	224	1600	1830	1750	320	403
29	173	98	75	44	53	32	244	1620	1890	1650	266	389
30	181	94	72	41	---	31	258	1310	1650	1790	292	388
31	117	---	66	41	---	32	---	1100	---	1950	282	---
TOTAL	28011	5175	2545	1844	1375	1143	4044	20368	66420	51340	30879	9726
MEAN	904	173	82.1	59.5	47.4	36.9	135	657	2214	1656	996	324
MAX	4820	649	214	140	77	52	258	1620	5380	2320	2300	1250
MIN	117	61	38	39	36	27	34	236	804	1190	255	171
CFSM	6.23	1.19	.57	.41	.33	.25	.93	4.53	15.3	11.4	6.87	2.23
IN.	7.19	1.33	.65	.47	.35	.29	1.04	5.23	17.04	13.17	7.92	2.50
AC-FT	55560	10260	5050	3660	2730	2270	8020	40400	131700	101800	61250	19290

CAL YR 1979 TOTAL 292219.0 MEAN 801 MAX 7010 MIN 9.8 CFSM 5.52 IN 74.97 AC-FT 579600
WTR YR 1980 TOTAL 222870.0 MEAN 609 MAX 5380 MIN 27 CFSM 4.20 IN 57.18 AC-FT 442100

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949, 1966, 1968-69, 1972, 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August to September 1980.
WATER TEMPERATURES: April 1979 to current year.

INSTRUMENTATION.--Temperature recorder Jan. 9, 1979 to Aug. 20, 1980. Mini-water-quality monitor since Aug. 21, 1980.

REMARKS.--Records good. Missing temperature record, Dec. 21 to Feb. 10, due to battery problems.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 43 micromhos/cm Sept. 19 and 20, 1980; minimum recorded, 24 micromhos/cm Aug. 23, 1980.
WATER TEMPERATURES: Maximum, 13.5°C June 24, 1980; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, for period August and September, 43 micromhos/cm Sept. 19 and 20; minimum recorded, 24 micromhos/cm Aug. 23.
WATER TEMPERATURES: Maximum, 13.5°C June 24; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
NOV 15...	1700	349	64	7.3	4.0	2.0	11.4	5	1	25	9	8.2
FEB 11...	1420	44	90	7.4	.5	1.5	14.0	E1	E0	37	7	12
MAR 26...	1300	30	101	7.9	1.0	.70	12.8	0	0	34	0	11
MAY 29...	1000	1430	43	7.3	5.5	6.4	12.4	K1	K1	17	1	5.5
AUG 06...	1600	1280	--	--	--	--	--	5	K22	--	--	--
07...	1600	1410	35	7.3	9.0	1.6	11.6	--	--	14	14	4.8

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV 15...	1.2	1.4	.9	20	0	8.4	1.4	.2	4.2	29	39
FEB 11...	1.6	1.6	1.3	37	0	13	1.2	.2	4.1	48	53
MAR 26...	1.5	1.8	1.3	46	0	6.3	1.6	.3	4.0	51	52
MAY 29...	.8	.8	.8	19	0	1.1	1.3	.0	2.5	31	23
AUG 06...	--	--	--	--	--	--	--	--	--	--	--
07...	.5	.8	.7	19	--	.1	1.8	.2	1.5	18	11

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
NOV 15...	.83	.65	.020	.020	.51	.43	.53	.08	.45	1.4	1.1
FEB 11...	.40	.02	.080	.000	.11	.43	.19	.00	.43	.59	.45
MAR 26...	.34	.34	.010	.010	.57	.34	.58	.23	.35	.92	.69
MAY 29...	.13	.12	.020	.030	1.8	.61	1.8	1.2	.64	1.9	.76
AUG 06...	--	--	--	--	--	--	--	--	--	--	--
07...	.40	.00	.010	.010	.19	.38	.20	3.7	.39	.60	.39

K NON-IDEAL COLONY COUNT.

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)
NOV											
15...	.010	.010	--	5.8	--	0	1	1	200	200	40
FEB											
11...	.000	.100	1.7	--	--	--	--	--	--	--	--
MAR											
26...	.030	.020	--	1.6	1.0	1	1	0	200	200	50
MAY											
29...	.010	.010	--	2.4	.2	2	1	1	0	0	20
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	.060	.030	--	3.9	1.0	1	0	1	0	0	20

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
NOV											
15...	0	0	<1	0	0	0	0	0	<3	2	2
FEB											
11...	--	--	--	--	--	--	--	--	--	--	--
MAR											
26...	0	0	<1	30	30	0	0	0	<3	3	0
MAY											
29...	0	--	<1	0	0	0	1	--	<3	1	0
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	0	--	<1	10	10	0	0	--	<3	17	10

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
NOV											
15...	0	210	140	70	3	1	2	10	7	3	.1
FEB											
11...	--	--	--	--	--	--	--	--	--	--	--
MAR											
26...	3	60	40	20	4	4	0	0	0	3	.1
MAY											
29...	2	840	800	40	4	4	0	20	--	<1	.5
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	7	1900	1800	60	18	10	8	30	20	7	.5

DATE	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)
NOV											
15...	.0	.1	1	1	0	0	0	0	0	0	0
FEB											
11...	--	--	--	--	--	--	--	--	0	--	--
MAR											
26...	.0	.5	2	2	0	0	0	0	0	0	0
MAY											
29...	.0	.5	5	5	0	0	0	0	0	0	0
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	.3	.2	3	1	2	0	0	0	0	0	2

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
NOV 15...	50	40	10	11	10	--	--	--	--	--	--
FEB 11...	--	--	--	3	.36	--	--	--	--	--	--
MAR 26...	10	0	20	3	.24	--	--	--	--	--	--
MAY 29...	40	40	5	31	120	--	--	--	--	--	--
AUG 06...	--	--	--	--	--	--	--	--	--	--	--
07...	40	10	30	84	320	56	66	77	89	95	100

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	NOV 15,79	MAR 26,80	MAY 30,80	AUG 6,80
TIME	1700	1300	1000	1600
TOTAL CELLS/ML	23	26	77	3200
DIVERSITY: DIVISION	0.0	1.0	0.9	0.1
.CLASS	0.0	1.0	0.9	0.1
..ORDER	0.5	1.0	0.9	0.8
...FAMILY	1.2	1.0	0.9	0.8
....GENUS	1.2	1.0	0.9	1.6

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	*	0
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	2	10	--	-	26#	33	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	16#	70	13#	50	--	-	--	-
...NAVICULACEAE								
....NAVICULA	5#	20	--	-	--	-	*	0
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	26	1
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	52#	67	570#	18
..HORMOGONALES								
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	1600#	49
....OSCILLATORIA	--	-	--	-	--	-	1000#	32
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	13#	50	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), AUGUST TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1							---	---	---	29	25	27
2							---	---	---	28	25	27
3							---	---	---	27	25	26
4							---	---	---	30	25	28
5							---	---	---	31	29	30
6							---	---	---	33	30	32
7							---	---	---	34	32	33
8							---	---	---	34	31	33
9							---	---	---	32	30	31
10							---	---	---	34	32	33
11							---	---	---	35	33	34
12							---	---	---	36	33	35
13							---	---	---	37	34	36
14							---	---	---	36	34	35
15							---	---	---	34	31	33
16							---	---	---	36	32	34
17							---	---	---	38	35	36
18							---	---	---	39	35	37
19							---	---	---	43	38	40
20							---	---	---	43	39	41
21							28	26	27	41	39	40
22							32	27	30	41	39	40
23							28	24	27	43	39	41
24							30	25	27	40	37	38
25							31	25	28	39	37	38
26							31	25	28	40	37	39
27							31	25	28	41	38	40
28							28	25	27	39	37	38
29							32	26	29	40	38	39
30							30	25	27	40	38	39
31							28	25	27	---	---	---
MONTH										43	25	35

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	5.5	4.5	2.0	3.5	3.0	2.0	2.5			
2	5.5	5.0	5.0	2.0	1.0	1.5	2.5	.5	1.5			
3	5.5	4.0	5.0	2.0	1.0	1.5	1.0	.5	1.0			
4	5.5	5.0	5.0	1.5	.5	1.0	2.0	.5	1.5			
5	6.0	5.0	5.0	1.0	.5	.5	3.5	1.5	2.5			
6	6.0	4.5	5.0	1.0	.5	.5	1.5	.5	1.5			
7	6.0	4.0	5.0	1.5	.5	1.0	3.0	1.5	2.0			
8	5.0	3.5	4.0	1.0	.0	.5	3.0	2.0	2.5			
9	6.0	5.0	5.5	2.0	.5	1.0	2.5	.5	1.5			
10	6.0	5.0	5.5	2.0	1.0	1.5	2.5	1.0	1.5			
11	5.5	5.0	5.5	3.0	2.0	2.5	2.5	1.0	1.5			
12	5.5	4.5	5.0	3.0	2.5	3.0	1.5	.5	1.0			
13	5.0	4.0	4.5	3.0	2.5	3.0	1.0	.5	.5			
14	5.0	4.0	4.5	2.5	2.0	2.0	.5	.5	.5			
15	5.0	3.5	4.5	4.5	2.5	4.5	.0	.0	.0			
16	4.0	2.5	3.0	4.0	3.5	4.0	.5	.0	.0			
17	5.0	3.5	4.0	3.5	2.5	3.0	.0	.0	.0			
18	4.5	3.0	3.5	2.5	1.5	2.0	.0	.0	.0			
19	4.0	1.5	3.0	1.0	1.0	1.0	.0	.0	.0			
20	4.0	3.0	3.0	3.0	1.0	2.5	.0	.0	.0			
21	3.5	2.5	3.0	4.0	3.0	3.5	---	---	---			
22	3.5	2.5	3.0	4.0	3.5	3.5	---	---	---			
23	4.5	3.0	3.5	4.0	3.0	3.5	---	---	---			
24	4.5	4.0	4.0	3.0	1.5	2.0	---	---	---			
25	4.5	3.0	3.5	1.5	.5	1.0	---	---	---			
26	3.5	1.5	2.5	2.0	1.0	1.5	---	---	---			
27	4.0	3.0	3.5	1.5	1.0	1.0	---	---	---			
28	4.0	3.0	3.5	2.0	1.0	1.5	---	---	---			
29	4.5	3.5	4.0	3.0	2.0	2.5	---	---	---			
30	5.5	4.0	4.5	3.0	1.0	2.5	---	---	---			
31	5.0	4.0	4.5	---	---	---	---	---	---			
MONTH	6.0	1.5	4.0	4.5	.0	2.0	3.5	.0				

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	.0	.0	.0	3.5	1.0	2.0	4.5	2.5	3.5
2	---	---	---	.0	.0	.0	3.5	1.0	2.0	6.5	2.5	4.0
3	---	---	---	.0	.0	.0	4.0	1.0	2.0	8.0	2.5	4.5
4	---	---	---	.0	.0	.0	4.0	1.0	2.0	7.0	1.5	4.5
5	---	---	---	.0	.0	.0	4.5	.5	2.0	7.0	3.5	4.5
6	---	---	---	.0	.0	.0	3.5	1.0	2.0	4.5	3.0	3.5
7	---	---	---	.0	.0	.0	4.5	1.0	2.0	6.0	2.5	4.0
8	---	---	---	.0	.0	.0	5.5	1.0	3.0	7.0	3.0	4.0
9	---	---	---	.5	.0	.0	5.5	.5	2.5	8.5	2.0	4.5
10	---	---	---	.0	.0	.0	5.0	1.0	2.5	8.0	2.0	4.5
11	.5	.0	.0	.0	.0	.0	2.0	.5	1.5	8.0	2.0	4.5
12	.5	.0	.0	.0	.0	.0	4.5	.5	2.0	8.0	2.5	4.5
13	.5	.0	.0	.5	.0	.0	5.5	1.0	2.5	8.0	2.5	4.5
14	.0	.0	.0	.0	.0	.0	6.5	.5	2.5	6.0	3.5	4.5
15	.0	.0	.0	.5	.0	.0	4.5	1.5	2.5	8.0	2.5	4.5
16	.0	.0	.0	.0	.0	.0	4.0	1.0	2.5	6.0	3.0	4.5
17	.0	.0	.0	.5	.0	.0	4.5	1.5	2.5	7.0	3.5	5.0
18	.0	.0	.0	.5	.0	.0	4.5	2.0	3.0	6.5	3.0	4.5
19	.0	.0	.0	.5	.0	.0	6.0	2.0	3.5	6.0	3.0	4.5
20	.0	.0	.0	.5	.0	.0	6.5	1.5	3.5	7.5	3.0	5.0
21	.0	.0	.0	1.0	.5	.5	4.0	2.0	3.0	7.5	3.0	5.0
22	.0	.0	.0	3.0	.5	1.0	4.5	1.5	3.0	9.0	3.0	5.5
23	.0	.0	.0	3.0	1.0	1.5	6.0	2.0	3.5	8.5	2.5	5.0
24	.0	.0	.0	2.0	.5	1.0	6.0	1.5	3.5	9.0	3.0	5.5
25	.0	.0	.0	2.5	1.0	1.5	7.0	2.5	4.5	6.5	3.5	5.0
26	.0	.0	.0	3.0	1.0	1.5	5.5	2.5	4.0	8.0	3.5	5.0
27	.0	.0	.0	2.5	1.0	1.5	4.5	2.5	3.5	8.5	3.0	5.0
28	.0	.0	.0	2.5	1.0	1.5	6.0	2.5	3.5	7.5	3.0	5.0
29	.0	.0	.0	3.5	1.0	2.0	5.0	2.0	3.5	9.5	3.5	6.0
30	---	---	---	2.0	1.0	1.5	5.0	2.5	3.5	6.5	4.0	5.5
31	---	---	---	3.5	1.5	2.0	---	---	---	7.0	5.0	6.0
MONTH				3.5	.0	.5	7.0	.5	3.0	9.5	1.5	4.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.0	4.0	6.0	10.0	6.0	8.0	9.0	7.0	7.5	9.0	5.5	6.5
2	12.0	4.0	7.5	10.5	7.0	8.5	9.5	7.0	8.0	8.5	6.0	6.5
3	11.5	4.5	7.5	12.5	7.0	9.5	8.5	7.0	7.5	7.0	5.5	6.0
4	11.0	4.5	7.0	13.0	6.5	9.0	11.0	7.0	8.5	6.5	5.0	5.5
5	9.0	5.0	7.0	13.0	6.5	9.5	12.0	7.0	9.0	5.5	5.0	5.0
6	7.0	5.5	6.0	9.5	8.0	8.5	12.0	7.0	9.0	7.5	4.5	6.0
7	10.0	4.5	6.5	9.0	7.0	8.0	11.0	7.0	9.0	7.0	5.5	6.0
8	10.0	4.5	7.0	11.5	7.0	8.5	9.5	8.0	8.5	6.5	5.5	6.0
9	9.0	5.0	6.5	11.5	7.5	9.0	9.5	7.5	8.5	8.5	6.0	6.5
10	10.5	5.0	7.0	10.0	7.0	8.5	11.5	7.0	8.5	7.5	5.5	6.0
11	7.5	5.0	6.5	11.5	6.5	9.0	11.5	7.0	9.0	7.5	4.5	6.0
12	7.5	5.5	6.5	10.5	7.5	9.0	10.0	7.5	8.5	8.0	4.0	5.5
13	7.5	5.0	6.0	9.5	7.5	8.5	9.5	6.5	8.0	7.0	5.0	6.0
14	9.0	5.0	7.0	10.0	7.0	8.5	8.0	6.0	7.0	8.0	6.0	6.5
15	9.5	5.5	7.5	8.5	7.5	8.0	8.5	6.5	7.5	7.0	6.0	6.5
16	9.0	6.0	7.0	8.5	7.0	7.5	7.5	6.5	7.0	7.0	5.5	6.0
17	9.5	5.5	7.0	9.5	6.5	8.0	10.5	6.5	8.0	6.0	4.5	5.0
18	10.5	5.0	7.0	11.0	6.0	8.5	9.0	8.0	8.0	6.0	3.5	4.5
19	12.0	4.5	7.5	12.0	7.5	9.0	9.5	7.0	8.0	6.5	4.5	5.0
20	11.0	5.0	8.0	10.5	7.5	9.0	10.0	5.5	8.0	6.0	3.0	4.5
21	9.0	6.5	7.5	11.5	7.5	9.0	8.0	6.0	7.0	5.0	3.5	4.0
22	9.0	6.0	7.5	9.5	7.0	8.5	8.0	5.0	6.5	5.0	4.0	4.5
23	12.5	6.0	8.5	8.5	8.0	8.0	9.0	5.5	6.5	6.5	5.0	6.0
24	13.5	6.5	9.5	10.5	7.5	8.5	9.0	5.5	6.5	5.5	4.0	5.0
25	13.0	6.0	9.0	10.0	6.5	8.5	9.0	5.0	6.5	6.5	4.0	5.0
26	12.5	6.5	9.0	9.0	8.0	8.5	8.5	5.0	6.5	7.0	4.5	5.5
27	9.5	7.0	8.0	10.0	7.5	8.5	9.0	5.0	6.5	6.5	5.5	6.0
28	9.0	7.0	8.0	9.0	7.5	8.0	6.5	5.5	6.0	6.0	5.0	5.5
29	9.5	6.5	8.0	9.0	7.0	7.5	9.0	5.0	6.5	6.5	5.0	5.5
30	10.0	6.0	7.5	8.5	6.5	7.5	9.5	5.5	7.0	6.5	5.0	5.5
31	---	---	---	8.0	7.0	7.5	6.5	5.5	6.0	---	---	---
MONTH	13.5	4.0	7.5	13.0	6.0	8.5	12.0	5.0	7.5	9.0	3.0	5.5
YEAR	13.5	.0	4.5									

15059500 WHIPPLE CREEK NEAR WARD COVE

LOCATION.--Lat 55°26'30", long 131°47'38", Gateway Borough, Hydrologic Unit 19060000, on Revillagigedo Island, on left bank 350 ft (107 m) upstream from old highway bridge on North Tongass Highway, 0.35 mi (0.56 km) upstream from mouth at Tongass Narrows, 2 mi (3 km) south of village of Knudsen Cove, and 3.4 mi (5.5 km) northwest of Ward Cove Post Office.

DRAINAGE AREA.--5.29 mi^2 (13.70 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1968 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27 m), from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--12 years, 35.1 ft^3/s (0.994 m^3/s), 90.10 in/yr (2,290 mm/yr), 25,430 acre-ft/yr (31.4 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,830 ft^3/s (80.1 m^3/s) Nov. 19, 1968, gage height, 8.73 ft (2.661 m), from rating curve extended above 600 ft^3/s (17 m^3/s); minimum daily, 1.0 ft^3/s (0.028 m^3/s) Jan. 14-16, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s (11.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 9	1430	502	14.2	4.47	1.363	Apr. 16	0730	875	24.8	5.38	1.640
Nov. 21	1000	*1,300	36.8	*6.19	1.887	May 1	1200	600	17.0	4.72	1.439
Dec. 27	0230	775	21.9	5.16	1.573	Sept.28	2200	744	21.1	5.09	1.551
Feb. 2	1145	544	15.4	4.55	1.387						

Minimum discharge, 3.8 ft^3/s (0.11 m^3/s) part or all of each day June 20-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	11	16	20	112	82	18	337	7.2	4.4	75	20
2	23	9.3	17	30	225	29	14	63	6.1	13	38	17
3	66	8.4	42	20	69	19	14	32	5.4	9.2	24	19
4	47	8.2	29	17	36	14	14	22	5.1	6.1	22	27
5	100	6.9	88	16	33	13	15	18	4.6	5.2	17	73
6	30	6.2	38	15	48	10	18	18	4.6	4.6	15	25
7	19	6.2	31	14	196	9.8	27	23	4.3	4.6	14	18
8	16	6.1	37	13	133	12	15	40	4.3	4.3	12	34
9	175	5.2	24	12	32	18	12	20	4.1	4.6	11	48
10	80	5.0	19	12	24	25	13	15	4.1	4.6	9.9	24
11	43	4.9	18	12	22	18	173	12	4.1	4.3	9.0	18
12	137	4.9	16	12	19	12	140	11	4.1	4.1	8.2	16
13	39	7.8	14	12	17	10	34	9.9	7.0	5.7	8.5	14
14	22	72	12	12	14	9.2	57	9.0	6.6	16	29	14
15	17	21	11	11	12	8.2	217	8.1	6.2	14	24	13
16	14	38	12	9.7	11	75	482	7.4	5.5	7.8	64	12
17	15	65	19	8.8	9.8	54	74	7.8	5.4	6.1	66	11
18	13	34	36	8.6	9.8	22	177	7.6	4.6	6.1	23	19
19	9.7	105	98	8.6	8.1	34	79	54	4.3	43	17	81
20	8.5	129	240	8.6	7.9	71	118	37	4.1	62	15	26
21	9.3	469	114	10	31	67	57	21	3.8	71	13	28
22	9.9	105	32	99	36	64	227	13	3.8	50	12	50
23	77	50	28	63	19	23	80	10	11	22	13	36
24	44	36	22	32	43	17	37	8.9	6.1	16	11	28
25	18	33	173	28	88	30	35	8.2	4.6	23	12	25
26	15	24	259	25	72	42	39	7.4	4.3	21	15	21
27	22	18	523	23	76	42	183	6.7	8.1	15	12	27
28	18	17	114	20	36	34	98	6.2	6.4	17	11	183
29	19	15	64	17	97	18	62	5.8	4.9	14	18	151
30	16	13	30	14	---	17	207	5.5	4.6	42	17	74
31	12	---	23	17	---	23	---	9.7	---	187	14	---
TOTAL	1187.4	1334.1	2199	620.3	1536.6	922.2	2736	854.2	159.3	707.7	649.6	1152
MEAN	38.3	44.5	70.9	20.0	53.0	29.7	91.2	27.6	5.31	22.8	21.0	38.4
MAX	175	469	523	99	225	82	482	337	11	187	75	183
MIN	8.5	4.9	11	8.6	7.9	8.2	12	5.5	3.8	4.1	8.2	11
CFSM	7.24	8.41	13.4	3.78	10.0	5.61	17.2	5.22	1.00	4.31	3.97	7.26
IN.	8.35	9.38	15.46	4.36	10.80	6.48	19.24	6.01	1.12	4.98	4.57	8.10
AC-FT	2360	2650	4360	1230	3050	1830	5430	1690	316	1400	1290	2280

CAL YR 1979 TOTAL 11814.9 MEAN 32.4 MAX 523 MIN 1.3 CFSM 6.13 IN 83.07 AC-FT 23430
WTR YR 1980 TOTAL 14058.4 MEAN 38.4 MAX 523 MIN 3.8 CFSM 7.26 IN 98.84 AC-FT 27880

15059500 WHIPPLE CREEK NEAR WARD COVE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-72 and 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
APR				
30...	1100	429	152	176

15067900 UPPER MAHONEY LAKE OUTLET NEAR KETCHIKAN

LOCATION.--Lat 55°24'50", long 131°33'16", in SE¼NE¼ sec.34, T.74 S., R.91 E., Gateway Borough, Hydrologic Unit 1906000, on Revillagigedo Island, in Tongass National Forest, on right bank 300 ft (100 m) upstream from lake outlet and 6 mi (10 km) northeast of Ketchikan.

DRAINAGE AREA.--2.03 mi^2 (5.26 km^2).

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (600 m), from topographic map.

REMARKS.--Records poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 487 ft^3/s (13.8 m^3/s) Nov. 21, 1979, gage height, 6.95 ft (2.118 m), from rating curve extended above 75 ft^3/s (2.1 m^3/s); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Jan. 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 487 ft^3/s (13.8 m^3/s) Nov. 21, gage height, 6.95 ft (2.118 m), from rating curve extended above 75 ft^3/s (2.1 m^3/s); minimum daily, 4.2 ft^3/s (0.12 m^3/s) Nov. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	20	15	16	25	62	5.6	110	52	48	117	64
2	15	15	15	20	45	35	4.7	120	41	128	55	62
3	51	12	16	12	25	23	4.7	70	52	76	37	76
4	70	9.9	15	10	19	15	4.7	31	75	58	36	88
5	132	8.6	63	9.0	18	12	4.9	22	102	58	34	100
6	51	7.4	68	8.0	50	9.6	5.8	40	79	45	31	95
7	27	6.9	38	7.0	40	8.0	8.6	71	64	41	29	70
8	18	5.8	33	6.5	26	7.7	8.0	116	64	36	28	46
9	80	5.3	25	6.0	20	7.1	7.1	63	63	48	28	38
10	99	4.9	20	5.5	18	8.3	7.4	52	49	46	29	50
11	50	4.4	17	5.5	14	8.6	20	56	48	45	26	42
12	66	4.2	15	5.0	12	8.0	49	51	49	60	23	30
13	42	12	13	5.0	10	7.1	38	48	54	61	23	26
14	25	143	11	5.0	9.0	6.1	34	37	51	62	52	24
15	17	53	9.6	5.0	7.7	5.6	58	35	50	47	62	22
16	16	69	8.6	4.5	6.6	11	107	40	45	44	70	23
17	20	93	10	4.5	5.6	30	74	67	37	40	92	18
18	22	43	15	4.5	5.1	36	51	57	29	35	78	20
19	17	49	40	4.5	4.7	47	49	62	27	92	56	50
20	13	240	44	6.0	5.6	59	29	41	35	125	46	50
21	18	295	65	8.0	9.3	27	21	29	36	101	34	75
22	23	163	50	13	15	38	31	22	45	83	27	65
23	113	53	36	16	17	25	27	25	103	56	23	60
24	98	33	22	17	13	16	27	33	65	50	20	50
25	43	25	15	15	18	15	33	40	62	59	23	30
26	39	17	20	12	33	13	47	48	58	47	26	35
27	129	14	90	10	85	11	58	67	53	49	25	50
28	96	12	110	9.0	61	9.3	70	63	44	53	42	70
29	60	10	65	9.0	55	7.7	60	53	36	47	56	200
30	47	12	46	11	---	7.4	80	53	41	93	62	150
31	29	---	30	14	---	7.1	---	62	---	242	58	---
TOTAL	1646	1440.4	1040.2	283.5	672.6	582.6	1024.5	1684	1609	2075	1348	1779
MEAN	53.1	48.0	33.6	9.15	23.2	18.8	34.2	54.3	53.6	66.9	43.5	59.3
MAX	132	295	110	20	85	62	107	120	103	242	117	200
MIN	13	4.2	8.6	4.5	4.7	5.6	4.7	22	27	35	20	18
CFSM	26.2	23.6	16.6	4.51	11.4	9.26	16.8	26.7	26.4	33.0	21.4	29.2
IN.	30.15	26.38	19.05	5.19	12.32	10.67	18.76	30.84	29.47	38.01	24.69	32.58
AC-FT	3260	2860	2060	562	1330	1160	2030	3340	3190	4120	2670	3530

CAL YR 1979 TOTAL 12154.1 MEAN 33.3 MAX 295 MIN 1.3 CFSM 16.4 IN 222.62 AC-FT 24110
WTR YR 1980 TOTAL 15184.8 MEAN 41.5 MAX 295 MIN 4.2 CFSM 20.4 IN 278.13 AC-FT 30120

NOTE.--No gage-height record Dec. 16 to Feb. 13 and Aug. 4 to Sept. 30.

15068000 MAHONEY CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°25'34", long 131°30'40", in SW¼NE¼ sec.25, T.74 S., R.91 E., Gateway Borough, Hydrologic Unit 19060000, on Revillagigedo Island, in Tongass National Forest, on right bank 0.1 mi (0.2 km) upstream from mouth at George Inlet, 0.1 mi (0.2 km) downstream from Mahoney Lake, and 8 mi (13 km) northeast of Ketchikan.

DRAINAGE AREA.--5.70 mi^2 (14.8 km^2).

PERIOD OF RECORD.--September 1920 to October 1925, September 1926 to October 1933, October 1947 to September 1958, October 1977 to current year. Monthly discharge only for some periods, published in WSP 1372. Prior to October 1947, published as "at George Inlet".

GAGE.--Water-stage recorder. Altitude of gage is 48 ft (15 m), by barometer. Prior to October 1947, at site 80 ft (24 m) downstream at different datum and October 1947 to September 1958 at site 80 ft (24 m) downstream at datum 2.68 ft (0.817 m) lower.

REMARKS.--Records good.

AVERAGE DISCHARGE.--26 years (water years 1920-25, 1926-33, 1947-58, 1978-80), 104 ft^3/s (2.945 m^3/s), 247.78 in/yr (6,278 mm/yr), 75,350 acre-ft/yr (92.9 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,530 ft^3/s (71.6 m^3/s) Feb. 2, 1954, gage height, 4.66 ft (1.420 m) site and datum then in use, from rating curve extended above 1,100 ft^3/s (31.2 m^3/s); minimum daily, 1.5 ft^3/s (0.042 m^3/s) Jan. 30 to Feb. 1, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 567 ft^3/s (16.1 m^3/s) July 31, no peak above base of 950 ft^3/s (27 m^3/s); minimum daily, 12 ft^3/s (0.34 m^3/s) Nov. 12 and Jan. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	343	48	33	44	34	117	29	248	110	71	363	140
2	127	37	36	48	74	103	26	176	86	206	173	109
3	106	30	42	47	102	71	25	128	86	183	99	109
4	166	26	43	41	79	50	24	74	125	118	85	171
5	285	23	116	33	57	39	23	68	183	106	75	211
6	152	21	124	29	58	32	25	84	193	88	66	127
7	71	18	91	25	116	28	36	137	165	77	65	75
8	48	17	71	22	103	25	40	247	151	68	59	75
9	132	15	58	20	93	26	36	171	152	75	57	60
10	250	14	46	18	67	27	33	124	125	81	58	95
11	118	14	42	17	52	28	96	126	110	77	56	79
12	122	12	35	16	41	26	153	119	113	83	51	59
13	99	14	31	15	38	24	129	107	118	93	48	48
14	62	169	27	15	33	22	113	87	119	105	45	32
15	45	119	24	15	29	20	149	76	114	93	59	34
16	36	113	22	14	25	25	158	79	109	78	119	31
17	34	187	30	14	23	41	147	118	97	71	194	27
18	35	113	113	13	21	36	143	129	77	64	110	26
19	33	146	115	13	19	36	140	196	68	119	70	130
20	29	235	145	13	18	65	136	160	74	242	54	116
21	28	263	120	12	19	85	124	110	81	232	46	79
22	30	209	97	13	21	128	149	76	85	211	41	149
23	115	148	71	27	21	94	132	63	194	124	38	101
24	220	90	50	42	22	61	107	67	160	97	35	72
25	94	71	63	44	38	55	103	79	127	110	34	64
26	69	56	135	38	66	60	127	89	112	101	48	59
27	209	42	208	33	113	52	153	121	104	97	57	54
28	209	34	201	30	108	53	164	130	91	106	49	85
29	137	29	128	26	112	42	137	112	75	90	101	318
30	110	28	92	26	---	35	204	106	69	149	144	179
31	66	---	58	26	---	32	---	110	---	567	91	---
TOTAL	3580	2341	2467	789	1602	1538	3061	3717	3473	3982	2590	2914
MEAN	115	78.0	79.6	25.5	55.2	49.6	102	120	116	128	83.5	97.1
MAX	343	263	208	48	116	128	204	248	194	567	363	318
MIN	28	12	22	12	18	20	23	63	68	64	34	26
CFSM	20.2	13.7	14.0	4.47	9.68	8.70	17.9	21.1	20.4	22.5	14.6	17.0
IN.	23.36	15.28	16.10	5.15	10.45	10.04	19.97	24.25	22.66	25.98	16.90	19.01
AC-FT	7100	4640	4890	1560	3180	3050	6070	7370	6890	7900	5140	5780

CAL YR 1979 TOTAL 28950 MEAN 79.3 MAX 470 MIN 12 CFSM 13.9 IN 188.90 AC-FT 57420
WTR YR 1980 TOTAL 32054 MEAN 87.6 MAX 567 MIN 12 CFSM 15.4 IN 209.16 AC-FT 63580

15072000 FISH CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°23'30", long 131°11'40", Gateway Borough, Hydrologic Unit 1906000, on Revillagigedo Island, in Tongass National Forest, on right bank 100 ft (30 m) upstream from outlet of Low Lake, 750 ft (230 m) upstream from mouth at Thorne Arm, and 18 mi (29 km) east of Ketchikan.

DRAINAGE AREA.--32.1 mi^2 (83.1 km^2), excludes that of Granite Lake drainage basin.

PERIOD OF RECORD.--May 1915 to October 1936, October 1938 to current year. Prior to October 1945, monthly discharge only. Prior to January 1921, published as "near Sea Level, Revillagigedo Island."

REVISED RECORDS.--WSP 1372: 1918.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6.1 m) by barometer. Prior to October 1935, at site 50 ft (15 m) downstream at different datum. October 1935 to Oct. 3, 1975, at prior site and present datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--62 years, 422 ft^3/s (11.95 m^3/s), 178.53 in/yr (4,535 mm/yr), 305,700 acre-ft/yr (377 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s (153 m^3/s) Oct. 15, 1961, gage height, 8.85 ft (2.697 m), site then in use, from rating curve extended above 3,600 ft^3/s (102 m^3/s); minimum daily, 20 ft^3/s (0.57 m^3/s) Sept. 9, 10, 1928.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft^3/s (62 m^3/s) and maximum (*).

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Nov. 21	2230	2,290	64.8	3.58	1.091	Dec. 27	1615	*4,520	128	*4.91	1.497

Minimum daily discharge, 74 ft^3/s (2.10 m^3/s) Jan. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	860	250	236	410	151	702	196	1780	341	141	1230	251
2	810	220	257	342	204	724	184	1970	337	138	1030	284
3	588	184	304	300	338	538	166	985	305	146	708	307
4	609	158	293	264	397	397	166	749	294	154	544	298
5	877	138	450	220	332	297	166	541	314	158	426	306
6	945	122	913	187	292	237	184	472	346	153	334	377
7	642	110	773	159	545	196	264	471	358	142	269	364
8	440	99	640	135	1050	177	307	515	346	130	221	309
9	521	90	508	115	828	184	312	534	325	124	184	264
10	1010	88	390	98	572	196	278	487	296	116	157	288
11	862	83	329	89	414	200	380	462	267	112	137	294
12	916	75	278	85	322	180	861	455	246	106	121	257
13	888	78	244	87	264	169	887	448	238	104	110	213
14	613	220	195	87	229	151	664	415	245	111	112	175
15	432	322	161	93	200	132	657	365	247	140	166	151
16	347	332	142	93	177	166	1170	335	241	160	284	131
17	326	573	178	93	151	229	1310	330	231	161	526	113
18	318	583	740	88	135	204	1130	347	215	151	517	99
19	278	594	1580	84	119	200	1050	425	192	158	390	109
20	233	908	1710	78	107	237	779	548	173	325	299	274
21	220	1830	1500	74	122	292	657	528	162	555	236	394
22	180	1980	986	94	158	545	709	444	156	640	193	355
23	192	1260	635	163	151	621	930	362	180	532	167	377
24	269	802	436	239	145	506	763	313	228	406	142	404
25	302	597	453	250	188	414	614	292	238	337	126	348
26	283	440	844	214	250	375	545	289	225	307	133	337
27	259	323	3400	177	338	322	664	293	211	320	133	309
28	250	252	3090	145	397	332	895	309	193	382	122	292
29	269	212	1680	125	487	297	771	312	178	403	144	454
30	292	194	968	115	---	250	787	304	155	445	217	809
31	283	---	593	120	---	233	---	317	---	848	338	---
TOTAL	15314	13117	24906	4823	9063	9703	18446	16397	7483	8105	9716	8943
MEAN	494	437	803	156	313	313	615	529	249	261	313	298
MAX	1010	1980	3400	410	1050	724	1310	1970	358	848	1230	809
MIN	180	75	142	74	107	132	166	289	155	104	110	99
CFSM	15.4	13.6	25.0	4.86	9.75	9.75	19.2	16.5	7.76	8.13	9.75	9.28
IN.	17.75	15.20	28.86	5.59	10.50	11.24	21.38	19.00	8.67	9.39	11.26	10.36
AC-FT	30380	26020	49400	9570	17980	19250	36590	32520	14840	16080	19270	17740

CAL YR 1979 TOTAL 140306 MEAN 384 MAX 3400 MIN 27 CFSM 12.0 IN 162.59 AC-FT 278300
WTR YR 1980 TOTAL 146016 MEAN 399 MAX 3400 MIN 74 CFSM 12.4 IN 169.21 AC-FT 289600

15081500 STANEY CREEK NEAR CRAIG

LOCATION.--lat 55°48'57", long 133°07'58", Hydrologic Unit 19060000, in Tongass National Forest, on Prince of Wales Island, on left bank 1.3 mi (2.1 km) upstream from mouth at Tuxekan Passage and 23 mi (37 km) north of Craig.

DRAINAGE AREA.--51.6 mi² (133.6 km²).

PERIOD OF RECORD.--October 1964 to current year. Published as Lester River near Craig, October 1964 to September 1966.

REVISED RECORDS.--WSP 2136: 1965 (M).

GAGE.--Water-stage recorder. Altitude of gage is 2 ft (0.6 m), from topographic map.

REMARKS.--Water-discharge records good except those above 75 ft^3/s after June 21, which are fair, and those for periods of no gage-height record, which are estimated and poor.

AVERAGE DISCHARGE.--16 years, 367 ft^3/s (10.39 m^3/s), 96.59 in/yr (2,453 mm/yr), 265,900 acre-ft/yr (328 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft^3/s (442 m^3/s) Oct. 18, 1964, gage height, 13.1 ft (3.99 m) from floodmarks, from rating curve extended above 3,000 ft^3/s (85 m^3/s); minimum daily, 8.7 ft^3/s (0.24 m^3/s) Aug. 22-25, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft^3/s (200 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 5	1500	8,850	251	10.40	3.170	Dec. 26	0600	*11,600	329	*11.90	3.627

Minimum daily discharge, 41 ft^3/s (1.16 m^3/s) June 30 and July 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1100	240	721	250	2500	600	245	1540	78	41	292	210
2	450	205	301	675	750	375	195	808	72	93	292	179
3	530	175	218	290	480	275	175	415	69	87	152	171
4	580	155	483	175	435	215	183	222	78	75	135	270
5	1180	145	4780	145	485	185	195	202	72	58	103	270
6	440	135	795	145	900	156	214	191	72	50	87	191
7	275	125	314	121	1700	138	510	319	60	48	72	152
8	600	120	533	96	650	182	270	275	55	44	66	210
9	1950	115	241	145	360	333	206	171	50	55	63	279
10	500	110	397	163	255	214	195	152	44	58	58	229
11	380	115	922	183	205	195	347	152	44	58	52	135
12	520	135	210	211	155	163	814	135	44	48	58	118
13	290	400	141	195	128	216	371	131	48	63	58	103
14	210	1170	125	210	115	159	265	121	75	135	78	103
15	190	395	131	325	205	203	655	118	87	141	87	93
16	235	450	160	480	265	451	2410	115	103	103	191	87
17	320	380	860	265	195	488	1270	115	103	75	292	81
18	260	470	4320	210	120	374	2310	115	72	72	171	103
19	205	740	1780	295	100	710	1060	206	63	152	125	210
20	180	2150	2020	255	89	1020	556	288	52	292	103	171
21	205	4800	1050	380	125	1190	580	288	50	250	87	135
22	400	1500	352	575	215	1960	1280	175	48	202	81	250
23	2500	880	222	760	300	458	804	121	50	237	72	250
24	575	700	183	150	490	233	391	112	50	199	72	152
25	480	500	626	138	1100	214	408	96	44	191	118	229
26	550	360	2860	235	1170	275	319	90	44	131	152	210
27	680	237	5300	255	750	254	887	96	44	103	103	191
28	1390	125	3650	220	650	454	846	96	50	96	87	210
29	450	99	925	125	735	338	371	81	48	152	152	292
30	340	781	305	90	---	271	1450	78	41	179	250	270
31	275	---	202	110	---	404	---	90	---	250	145	---
TOTAL	18240	17912	35127	7872	15627	12703	19782	7114	1810	3738	3854	5554
MEAN	588	597	1133	254	539	410	659	229	60.3	121	124	185
MAX	2500	4800	5300	760	2500	1960	2410	1540	103	292	292	292
MIN	180	99	125	90	89	138	175	78	41	41	52	81
CFSM	11.4	11.6	22.0	4.92	10.4	7.95	12.8	4.44	1.17	2.35	2.40	3.59
IN.	13.15	12.91	25.32	5.68	11.27	9.16	14.26	5.13	1.30	2.69	2.78	4.00
AC-FT	36180	35530	69670	15610	31000	25200	39240	14110	3590	7410	7640	11020

CAL YR 1979 TOTAL 142465 MEAN 390 MAX 5300 MIN 21 CFSM 7.56 IN 102.71 AC-FT 282600
WTR YR 1980 TOTAL 149333 MEAN 408 MAX 5300 MIN 41 CFSM 7.91 IN 107.66 AC-FT 296200

NOTE.--No gage-height record prior to Nov. 27 and Jan. 13 to Feb. 15.

15081580 BLACK BEAR LAKE OUTLET NEAR KLAWOCK

LOCATION.--Lat 55°33'25", long 132°52'33", in SW¼NE¼ sec.12, T.73 S., R.82 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank at outlet of Black Bear Lake 8.6 mi (13.8 km) east of Klawock.

DRAINAGE AREA.--1.82 mi² (4.71 km²).

PERIOD OF RECORD.--June to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 1,700 ft (520 m), from topographic map.

REMARKS.--Water-discharge records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 87 ft³/s (2.46 m³/s) Aug. 17, gage height, 5.48 ft (1.670 m); minimum daily, 8.1 ft³/s (0.23 m³/s) Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	16	54	25
2									---	24	46	26
3									---	26	31	24
4									---	23	29	34
5									---	21	22	38
6									---	18	18	30
7									---	15	15	21
8									---	14	13	20
9									---	16	12	26
10									---	15	11	21
11									---	14	11	16
12									---	15	9.8	13
13									---	18	9.4	11
14									---	23	13	9.3
15									---	22	18	8.7
16									---	18	45	8.3
17									---	17	74	8.1
18									---	16	40	9.3
19									---	26	26	28
20									---	40	20	22
21									17	34	16	17
22									16	29	14	36
23									20	42	14	37
24									21	45	13	25
25									20	42	13	47
26									20	33	15	34
27									21	26	14	24
28									20	24	12	25
29									18	27	19	60
30									17	37	25	50
31									---	53	21	---
TOTAL	---	---	---	---	---	---	---	---	---	789	693.2	753.7
MEAN	---	---	---	---	---	---	---	---	---	25.5	22.4	25.1
MAX	---	---	---	---	---	---	---	---	---	53	74	60
MIN	---	---	---	---	---	---	---	---	---	14	9.4	8.1
CFSM	---	---	---	---	---	---	---	---	---	14.0	12.3	13.8
IN.	---	---	---	---	---	---	---	---	---	16.12	14.16	15.40
AC-FT	---	---	---	---	---	---	---	---	---	1560	1370	1490

15083500 PERKINS CREEK NEAR METLAKATLA

LOCATION.--Lat 54°56'48", long 132°10'15", in NW¼SW¼ sec.9, T.80 S., R.88 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on right bank 1,000 ft (305 m) upstream from mouth at South Arm of Moria Sound, 27 mi (43 km) southwest of Metlakatla, and 35 mi (56 km) southwest of Ketchikan.

DRAINAGE AREA.--3.38 mi^2 (8.75 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 18 ft (5.5 m), from topographic map.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 860 ft^3/s (24.4 m^3/s) Sept. 13, 1976, gage height, 4.76 ft (1.451 m), from rating curve extended above 80 ft^3/s (2.3 m^3/s); minimum daily, 1.2 ft^3/s (0.034 m^3/s) Aug 27, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 848 ft^3/s (24.0 m^3/s) Feb. 2, gage height, 4.61 ft (1.405 m); minimum daily, 1.9 ft^3/s (0.054 m^3/s) July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	16	22	29	132	58	16	115	3.4	2.4	31	24
2	26	13	60	95	306	19	14	28	3.0	9.5	15	14
3	67	12	142	20	56	12	13	16	2.9	5.1	9.2	62
4	29	11	82	13	36	9.1	12	12	2.8	3.5	9.2	55
5	80	10	160	9.6	98	7.3	20	11	2.7	2.9	6.3	86
6	33	9.3	30	8.4	96	6.3	42	20	2.6	2.6	5.1	21
7	19	8.7	64	7.8	142	5.8	56	34	2.4	2.5	4.4	12
8	15	8.2	30	9.8	76	21	17	32	2.3	2.4	3.9	55
9	235	7.8	16	9.9	26	29	16	13	2.3	2.4	3.5	54
10	71	7.5	34	5.7	17	24	25	9.4	2.3	2.2	3.2	14
11	38	8.0	42	6.0	14	13	192	7.9	2.3	2.0	3.0	9.8
12	65	13	15	7.1	13	10	88	6.9	2.1	1.9	2.7	7.9
13	20	45	12	8.9	11	9.3	20	6.5	2.3	2.5	2.6	6.8
14	15	102	20	12	8.5	7.3	27	6.2	3.4	5.3	8.2	6.1
15	12	15	17	14	6.7	6.7	63	5.5	3.8	3.1	16	5.7
16	28	28	17	15	8.0	143	190	5.1	5.2	2.3	63	5.3
17	31	36	103	13	5.3	44	38	7.1	3.9	2.0	37	4.6
18	20	28	121	11	5.2	22	138	6.0	3.0	2.1	10	21
19	16	79	84	13	5.3	36	31	61	2.7	24	6.7	44
20	11	138	199	16	9.4	51	30	25	2.5	32	5.2	12
21	20	140	58	15	56	75	33	12	2.3	48	4.5	28
22	40	62	21	25	45	58	79	7.8	2.3	30	11	25
23	118	61	29	56	19	16	35	6.2	11	9.5	10	11
24	50	32	16	16	25	55	40	5.4	5.7	27	5.8	8.0
25	21	30	72	11	53	80	146	5.0	3.6	28	35	15
26	62	16	135	15	125	68	40	4.5	2.9	12	43	8.6
27	45	11	192	19	134	67	144	4.3	2.9	15	10	15
28	86	10	112	14	30	33	39	4.0	3.6	13	6.7	93
29	43	8.5	39	7.4	102	17	23	3.5	3.1	17	88	62
30	24	13	19	76	---	59	124	3.4	2.7	34	17	21
31	19	---	20	162	---	29	---	3.6	---	112	24	---
TOTAL	1440	979.0	1983	740.6	1660.4	1090.8	1751	487.3	98.0	458.2	500.2	806.8
MEAN	46.5	32.6	64.0	23.9	57.3	35.2	58.4	15.7	3.27	14.8	16.1	26.9
MAX	235	140	199	162	306	143	192	115	11	112	88	93
MIN	11	7.5	12	5.7	5.2	5.8	12	3.4	2.1	1.9	2.6	4.6
CFSM	13.8	9.65	18.9	7.07	17.0	10.4	17.3	4.65	.97	4.38	4.76	7.96
IN.	15.84	10.77	21.82	8.15	18.27	12.00	19.27	5.36	1.08	5.04	5.50	8.88
AC-FT	2860	1940	3930	1470	3290	2160	3470	967	194	909	992	1600

CAL YR 1979 TOTAL 11474.2 MEAN 31.4 MAX 280 MIN 1.2 CFSM 9.29 IN 126.25 AC-FT 22760
WTR YR 1980 TOTAL 11995.3 MEAN 32.8 MAX 306 MIN 1.9 CFSM 9.70 IN 131.98 AC-FT 23790

15083500 PERKINS CREEK NEAR METLAKATLA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1976 to August 1979 and February to September 1980.

INSTRUMENTATION.--Temperature recorder since Aug. 6, 1976.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 18.0°C Aug. 14, 15, and 20, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.0°C June 7, 8, and Aug. 11; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV									
15...	1230	19	33	6.0	7.5	10.0	6	--	1.3
FEB									
16...	1330	6.1	78	7.2	.0	--	7	--	2.0
MAY									
05...	1045	11	42	6.7	7.5	12.0	8	1	1.7
AUG									
08...	1500	3.8	39	7.4	15.0	9.7	--	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV									
15...	.7	3.7	.3	--	4.6	7.0	.1	3.0	--
FEB									
16...	.5	3.9	.6	--	1.1	7.7	.2	4.6	--
MAY									
05...	.8	4.2	.4	8	6.8	6.8	.2	3.7	29
AUG									
08...	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
NOV								
15...	--	--	.02	.020	.51	.53	.55	.020
FEB								
16...	--	--	.06	.010	.17	.18	.24	.000
MAY								
05...	.02	.000	.02	.010	--	--	--	--
AUG								
08...	--	--	--	--	--	--	--	--

15083500 PERKINS CREEK NEAR METLAKATLA--Continued

TEMPERATURE, WATER (DEG. C), FEBRUARY TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---	4.5	4.0
2									---	---	4.5	3.5
3									---	---	4.0	3.0
4									---	---	3.0	1.5
5									---	---	2.0	.5
6									---	---	2.0	.5
7									---	---	2.5	1.0
8									---	---	3.0	2.5
9									---	---	3.5	2.5
10									---	---	3.5	3.0
11									---	---	3.0	2.0
12									---	---	2.5	2.0
13									---	---	2.5	1.5
14									---	---	2.0	1.0
15									---	---	2.5	1.5
16									1.5	.0	2.5	2.0
17									1.0	.0	3.0	2.0
18									1.5	.5	3.5	2.5
19									1.5	1.0	3.5	3.0
20									1.5	.5	4.5	3.5
21									1.5	.5	5.0	4.0
22									1.5	.5	4.5	4.0
23									2.5	1.0	5.0	4.0
24									2.5	2.0	4.0	2.5
25									3.0	2.5	3.0	2.5
26									3.5	2.5	4.0	2.5
27									4.0	3.0	3.5	3.0
28									4.0	3.5	3.5	2.0
29									4.5	4.0	3.5	2.5
30									---	---	3.5	2.5
31									---	---	4.0	2.0
MONTH									4.5	.0	5.0	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	2.5	7.0	6.0	12.0	9.5	13.5	12.0	13.0	12.0	11.5	11.0
2	4.5	3.0	7.0	5.0	13.5	8.5	13.0	12.0	14.0	12.0	11.5	10.5
3	5.0	3.0	7.5	5.0	15.0	9.5	14.5	11.0	13.5	13.0	11.0	10.5
4	5.0	4.0	8.0	6.0	16.0	11.0	16.5	12.0	13.5	12.0	10.5	10.0
5	5.5	4.0	8.5	7.5	16.0	12.0	14.5	13.0	14.5	11.5	10.5	10.0
6	5.0	4.0	8.0	7.5	16.5	12.0	13.5	13.0	15.0	12.0	10.0	9.0
7	5.0	3.5	8.0	7.0	17.0	12.0	13.5	12.5	15.0	12.5	10.0	8.5
8	5.0	3.5	7.5	6.5	17.0	13.0	13.0	12.0	16.0	14.0	10.5	9.5
9	5.5	4.5	9.0	6.0	14.5	12.5	15.0	12.5	16.0	12.5	11.0	10.0
10	6.0	5.0	10.5	7.5	14.5	11.5	14.5	12.5	16.0	13.0	10.5	9.5
11	5.5	4.0	11.0	8.0	15.5	11.5	16.0	12.0	17.0	13.5	10.0	8.5
12	5.5	4.5	11.5	8.5	14.0	12.5	15.5	13.0	15.5	13.5	10.0	8.0
13	6.0	4.0	10.0	9.0	13.0	11.5	14.5	13.5	15.0	13.5	10.0	8.5
14	6.0	5.5	11.0	8.5	13.0	11.5	14.0	13.5	14.0	13.0	11.0	9.5
15	5.5	5.0	10.0	7.5	13.0	12.0	14.0	13.0	13.5	13.0	12.0	10.5
16	5.5	5.0	10.0	9.0	14.0	12.0	13.5	12.5	13.0	12.0	12.5	11.5
17	5.5	5.0	10.0	8.5	13.5	11.5	13.0	12.5	13.0	11.5	12.0	11.0
18	6.0	4.0	9.0	8.0	12.5	11.5	13.0	12.5	13.0	11.5	11.5	11.5
19	5.5	5.0	8.0	7.0	13.5	11.5	13.5	12.5	13.0	12.0	11.5	10.5
20	5.5	4.0	7.5	6.0	15.5	11.0	13.5	12.5	12.0	11.0	10.5	9.0
21	5.0	4.0	8.5	7.0	13.5	12.0	13.5	13.0	12.5	10.5	9.5	9.5
22	5.0	4.0	10.0	6.5	13.0	12.0	13.5	12.5	12.0	11.0	10.5	9.5
23	5.5	4.0	11.5	7.5	14.0	11.5	14.0	13.0	12.0	11.0	10.5	10.0
24	5.5	3.0	12.0	8.0	15.5	11.5	13.0	12.5	12.5	11.0	10.0	9.0
25	5.0	5.0	12.0	9.0	16.0	13.0	13.0	12.0	11.5	11.0	11.0	10.0
26	6.5	5.0	12.5	9.5	14.0	13.0	13.5	12.5	12.5	11.0	11.0	10.0
27	6.0	5.0	13.5	10.0	13.0	12.0	13.5	13.0	12.0	10.5	11.0	10.0
28	6.5	5.0	12.5	10.5	13.0	11.0	13.5	12.5	12.0	11.0	10.5	10.0
29	6.0	5.5	13.0	9.5	13.0	12.0	13.0	12.5	11.5	11.0	10.5	10.0
30	6.5	5.5	11.5	10.0	15.5	11.5	13.0	12.5	12.0	11.5	10.5	10.0
31	---	---	11.5	10.0	---	---	13.0	12.5	12.0	11.0	---	---
MONTH	6.5	2.5	13.5	5.0	17.0	8.5	16.5	11.0	17.0	10.5	12.5	8.0
YEAR	17.0	.0										

15085100 OLD TOM CREEK NEAR KASAAN

LOCATION.--Lat 55°23'44", long 132°24'25", in SW¼NW¼ sec.6, T.75 S., R.86 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank 1,000 ft (300 m) upstream from mouth at Skowl Arm of Kasaan Bay, 0.4 mi (0.6 km) downstream from unnamed tributary, and 10 mi (16 km) south of Kasaan.

DRAINAGE AREA.--5.90 mi² (15.28 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1949 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (3 m), from topographic map.

REMARKS.--Water-discharge records good except those above 100 ft³/s (2.8 m³/s), which are fair.

AVERAGE DISCHARGE.--31 years, 38.4 ft³/s (1.077 m³/s), 88.38 in/yr (2,245 mm/yr), 27,820 acre-ft/year (34.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,110 ft³/s (31.4 m³/s) Nov. 21, 1979, gage height, 6.14 ft (1.871 m), from rating curve extended above 140 ft³/s (4.0 m³/s); minimum recorded, 0.16 ft³/s (0.005 m³/s) Nov. 15, 1965, gage height, 1.10 ft (0.335 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 23	0200	624	17.7	4.93	1.503	Feb. 2	1445	516	14.6	4.47	1.362
Nov. 21	1045	*1,110	31.4	*6.14	1.871	Apr. 16	1615	532	15.1	4.60	1.402
Dec. 20	1100	690	19.5	5.12	1.560	Apr. 18	1400	854	24.2	5.41	1.649
Dec. 28	1430	587	16.6	4.82	1.469	Apr. 27	0845	502	14.2	4.41	1.344

Minimum daily discharge, 4.0 ft³/s (0.11 m³/s) Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	27	44	25	169	75	25	230	12	6.8	13	7.4
2	50	24	31	63	298	47	21	97	10	8.1	11	7.8
3	57	21	74	38	116	32	20	57	9.2	8.5	9.2	28
4	58	20	42	25	50	24	21	43	12	7.4	8.1	29
5	115	18	217	18	57	19	24	37	14	7.1	7.1	64
6	53	17	68	15	73	16	37	40	13	6.5	6.5	27
7	40	16	38	14	211	14	48	61	13	6.2	5.8	22
8	32	15	38	15	90	13	30	61	13	5.8	5.3	32
9	158	14	26	27	44	13	25	41	14	5.3	5.0	26
10	89	13	24	28	32	15	25	34	13	5.3	5.0	20
11	42	13	42	24	28	15	215	30	12	5.3	4.5	16
12	49	13	21	32	26	13	204	27	11	5.0	4.5	13
13	36	34	18	26	22	11	56	25	11	5.8	4.0	11
14	26	132	15	24	18	9.8	48	22	11	6.5	4.5	13
15	22	59	38	36	15	8.7	113	20	11	5.8	4.7	11
16	30	43	47	47	20	17	349	20	12	5.8	5.0	9.4
17	38	57	88	31	23	30	119	20	12	5.6	6.8	9.5
18	31	39	217	24	13	23	540	20	10	5.6	5.8	9.8
19	22	132	129	25	11	25	137	75	8.9	6.8	5.3	19
20	19	174	481	30	10	35	75	46	8.1	8.1	4.7	15
21	19	545	160	26	15	44	57	42	7.8	12	4.5	12
22	73	134	47	45	21	63	135	31	7.4	18	4.2	15
23	295	84	30	72	21	33	76	15	9.2	11	4.5	16
24	99	47	22	18	32	25	127	13	9.2	12	4.2	19
25	54	34	123	11	51	32	254	11	8.5	14	5.0	20
26	70	22	192	14	162	35	173	10	7.8	11	5.8	16
27	107	18	420	24	167	42	352	10	7.8	22	5.6	14
28	162	15	393	24	67	45	123	10	7.8	24	4.7	121
29	69	12	135	14	89	28	73	11	7.8	13	5.8	134
30	42	44	49	13	---	28	160	12	7.1	11	8.1	65
31	33	---	30	39	---	30	---	15	---	13	7.4	---
TOTAL	2078	1836	3299	867	1951	860.5	3662	1186	310.6	288.3	185.6	821.9
MEAN	67.0	61.2	106	28.0	67.3	27.8	122	38.3	10.4	9.30	5.99	27.4
MAX	295	545	481	72	298	75	540	230	14	24	13	134
MIN	19	12	15	11	10	8.7	20	10	7.1	5.0	4.0	7.4
CFSM	11.4	10.4	18.0	4.75	11.4	4.71	20.7	6.49	1.76	1.58	1.02	4.64
IN.	13.10	11.57	20.80	5.47	12.30	5.42	23.09	7.48	1.96	1.82	1.17	5.18
AC-FT	4120	3640	6540	1720	3870	1710	7260	2350	616	572	368	1630

CAL YR 1979 TOTAL 13693.0 MEAN 37.5 MAX 545 MIN 3.5 CFSM 6.36 IN 86.32 AC-FT 27160
WTR YR 1980 TOTAL 17345.9 MEAN 47.4 MAX 545 MIN 4.0 CFSM 8.03 IN 109.35 AC-FT 34410

15085100 OLD TOM CREEK NEAR KASAAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1959, and 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1964, April 1965 to February 1975, June 1975 to April 1978, and November 1978 to current year.

INSTRUMENTATION.--Temperature recorder since October 1964.

REMARKS.--Records fair except for missing periods Nov. 4-16, May 6 to June 11, and Sept. 15-30.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.5°C Aug. 12, 14-18, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 15.5°C Aug. 11-12; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV									
17...	1200	59	39	7.3	5.5	10.0	15	--	5.3
FEB									
16...	1645	15	45	7.1	.5	--	17	--	6.1
MAY									
05...	1445	31	33	7.2	6.0	12.5	15	0	5.1
AUG									
08...	1700	5.5	58	7.3	14.0	9.9	--	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV									
17...	.4	1.6	.3	--	5.4	2.7	.0	2.3	--
FEB									
16...	.4	1.6	.3	--	.0	3.0	.1	2.7	--
MAY									
05...	.5	1.6	.4	21	5.6	1.6	.1	1.9	27
AUG									
08...	--	--	--	31	--	--	--	--	--

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
NOV								
17...	--	--	.02	.070	.63	.70	.72	.020
FEB								
16...	--	--	.07	.000	.09	.09	.16	.000
MAY								
05...	.01	.000	.01	.030	--	--	--	--
AUG								
08...	--	--	--	--	--	--	--	--

15085100 OLD TOM CREEK NEAR KASAAN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.5	9.0	6.0	5.5	4.5	4.0	3.0	2.5	.5	.0	3.0	2.0
2	9.0	8.5	5.5	3.5	4.5	4.0	3.5	3.0	.5	.0	2.5	2.0
3	9.0	8.0	3.5	3.0	4.5	4.0	3.5	3.0	2.0	1.0	2.5	1.5
4	9.0	8.0	---	---	4.5	4.0	2.5	1.5	2.0	1.5	2.0	.5
5	9.0	8.0	---	---	5.0	4.5	1.5	.0	2.0	1.5	1.5	.0
6	9.0	8.0	---	---	5.0	4.5	1.5	1.0	2.5	2.0	1.5	.5
7	8.0	7.5	---	---	4.5	4.0	1.5	1.0	2.5	1.5	2.0	1.0
8	8.0	7.5	---	---	4.5	3.5	1.0	.0	2.0	2.0	2.5	1.5
9	9.5	8.0	---	---	3.5	3.0	.5	.5	2.5	2.0	2.5	2.0
10	9.5	8.5	---	---	3.0	2.5	.5	.5	2.0	2.0	2.5	2.0
11	9.5	9.0	---	---	3.0	2.5	.5	.5	2.0	1.5	2.5	1.0
12	9.5	8.0	---	---	2.5	1.5	.5	.5	2.0	1.5	2.0	1.0
13	8.0	7.5	---	---	1.0	.5	.5	.5	1.5	1.0	2.0	1.0
14	7.5	7.0	---	---	.5	.5	.5	.5	1.5	.5	1.5	.5
15	7.5	6.5	---	---	.5	.5	.5	.0	1.0	.0	2.0	.5
16	7.5	6.0	---	---	.5	.5	.5	.0	.5	.0	2.0	1.0
17	7.5	6.5	5.5	3.5	.5	.5	.5	.0	.5	.5	2.5	1.5
18	7.5	7.0	5.0	4.5	3.0	1.0	.5	.5	1.5	.5	2.5	1.5
19	7.0	6.0	6.0	4.5	3.0	3.0	.5	.0	1.5	.5	2.5	1.5
20	6.0	5.0	6.0	5.5	3.5	2.5	.5	.0	1.5	1.0	3.0	2.0
21	6.0	5.5	6.5	6.0	3.0	2.0	.5	.5	1.5	.5	3.0	2.0
22	6.5	5.5	6.0	5.5	2.5	2.0	.5	.5	2.0	1.0	3.0	2.5
23	7.5	6.5	5.5	5.5	2.5	2.0	.5	.5	2.0	1.5	3.0	2.0
24	7.0	6.5	5.5	5.0	2.5	2.0	1.0	.5	2.0	1.5	3.0	2.0
25	7.0	6.0	5.0	4.5	2.5	2.0	1.0	.0	2.5	1.5	3.0	2.0
26	6.5	6.0	4.5	3.5	3.0	2.5	.5	.0	2.5	2.0	3.5	2.0
27	6.5	6.0	3.5	3.0	3.5	2.5	.5	.5	2.5	1.5	3.0	2.0
28	6.5	6.0	4.0	3.5	3.5	2.5	.5	.5	2.5	2.0	3.5	2.0
29	6.5	5.5	5.0	4.0	3.5	3.0	.5	.5	2.5	2.0	3.5	2.0
30	6.5	5.5	5.0	4.5	3.0	2.5	.5	.0	---	---	3.5	2.0
31	6.0	5.5	---	---	3.0	2.5	.5	.0	---	---	4.0	2.0
MONTH	9.5	5.0			5.0	.5	3.5	.0	2.5	.0	4.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.0	2.0	5.0	4.5	---	---	13.0	12.0	12.5	12.0	11.5	11.0
2	4.0	2.0	5.5	4.5	---	---	12.5	11.5	13.0	11.5	11.5	10.5
3	4.0	2.0	5.5	4.0	---	---	13.5	11.0	12.5	12.0	11.0	10.5
4	4.0	2.0	6.0	4.0	---	---	14.5	12.0	13.5	12.0	11.0	10.0
5	4.5	3.0	6.0	5.0	---	---	14.0	12.5	13.5	11.5	11.0	10.0
6	4.5	3.0	---	---	---	---	13.5	12.5	14.0	12.0	11.0	10.0
7	4.5	3.0	---	---	---	---	12.5	12.0	14.0	12.5	10.5	9.5
8	4.5	2.5	---	---	---	---	13.0	12.0	14.0	13.5	11.0	10.0
9	4.5	3.0	---	---	---	---	13.5	12.5	15.0	13.0	11.0	10.5
10	4.5	3.0	---	---	---	---	14.0	12.5	15.0	13.5	11.0	10.0
11	4.5	3.0	---	---	---	---	14.5	12.0	15.5	13.5	10.5	9.0
12	4.5	3.5	---	---	13.0	11.0	14.5	13.0	15.5	14.0	10.5	9.0
13	4.5	3.0	---	---	12.5	12.0	14.0	13.0	15.0	14.0	10.0	9.0
14	5.0	3.5	---	---	12.5	11.5	13.0	12.5	14.5	13.5	11.0	10.0
15	4.0	3.0	---	---	12.5	12.0	13.0	12.0	14.0	13.0	---	---
16	4.0	3.5	---	---	12.5	11.5	13.0	12.0	13.0	13.0	---	---
17	4.5	3.5	---	---	11.5	10.5	12.5	12.0	13.5	12.5	---	---
18	4.5	3.5	---	---	11.5	10.5	12.5	12.0	13.0	12.0	---	---
19	4.5	3.5	---	---	12.5	11.0	12.5	12.0	14.0	12.5	---	---
20	4.5	3.5	---	---	14.0	11.0	13.0	12.0	13.0	12.0	---	---
21	4.5	3.5	---	---	12.5	11.5	13.0	12.0	12.5	12.0	---	---
22	4.0	3.5	---	---	12.0	11.5	13.0	12.0	12.0	11.5	---	---
23	4.5	3.5	---	---	13.0	11.5	12.5	12.0	12.5	11.5	---	---
24	5.0	4.0	---	---	14.0	11.0	12.5	12.0	12.5	12.0	---	---
25	4.5	4.0	---	---	14.5	12.5	13.0	12.0	12.0	12.0	---	---
26	5.0	4.0	---	---	13.5	12.5	13.0	12.0	12.5	11.5	---	---
27	5.0	4.0	---	---	12.5	12.0	13.0	12.5	12.5	11.0	---	---
28	5.0	4.0	---	---	12.0	11.0	13.0	12.0	12.0	11.0	---	---
29	5.5	4.0	---	---	12.5	11.5	12.5	12.0	12.0	11.5	---	---
30	5.0	4.0	---	---	14.0	11.5	13.0	12.0	12.0	11.5	---	---
31	---	---	---	---	---	---	12.5	12.0	11.5	11.0	---	---
MONTH	5.5	2.0					14.5	11.0	15.5	11.0		
YEAR	15.5	.0										

15086600 BIG CREEK NEAR POINT BAKER

LOCATION.--Lat 56°07'54", long 133°08'56", Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank 1 mi (1.6 km) upstream from mouth at Whale Passage, 2.5 mi (4.5 km) downstream from small unnamed lake, and 24 mi (39 km) southeast of Point Baker.

DRAINAGE AREA.--11.2 mi² (29.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map.

REMARKS.--Water-discharge records good except those for period of no gage-height record prior to Oct. 20 and for winter period, which are fair.

AVERAGE DISCHARGE.--17 years, 86.9 ft³/s (2.461 m³/s), 105.37 in/yr (2,676 mm/yr), 62,959 acre-ft/yr (77.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft³/s (41.1 m³/s), revised, Sept. 3, 1966, gage height, 5.28 ft (1.609 m), from rating curve extended above 300 ft³/s (8.5 m³/s) on basis of slope-area measurement at gage height 5.04 ft (1.536 m); minimum daily, 0.8 ft³/s (0.023 m³/s) Aug. 25, 28, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,330 ft³/s (37.7 m³/s) Oct. 9, gage height, 5.04 ft (1.536 m), computed by slope-area measurement of peak flow, only peak above base of 700 ft³/s (19.8 m³/s), revised; minimum daily, 5.8 ft³/s (0.16 m³/s) June 12.

REVISIONS.--The peak discharges and annual maximum (*) for some water years have been revised as shown in the following table. They supersede figures published in WSP 1936, WSP 2136, and reports for 1971-78.

Water year	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
1964	Dec. 31,1963	--	*770	21.8	*3.79	1.155
1965	Jan. 15,1965	--	*1,200	34.0	*4.75	1.448
1966	Oct. 22,1965	1230	923	26.1	4.13	1.259
	Jan. 16,1966	0800	837	23.7	a3.94	1.201
	Sept. 3,1966	2100	*1,450	41.1	*5.28	1.609
	Sept.29,1966	2300	878	24.9	4.03	1.228
1967	Oct. 7,1966	1130	774	21.9	3.80	1.158
	Sept.14,1967	0900	*900	25.5	*b5.00	1.524
1968	Sept.24,1968	1600	810	22.9	3.88	1.183
	Sept.28,1968	0800	*1,170	33.1	*4.68	1.426
1969	Oct. 3,1968	2000	*580	16.4	*3.36	1.024
1970	Oct. 31,1969	1500	869	24.6	4.01	1.222
	Nov. 1,1969	2300	919	26.0	4.12	1.256
	Nov. 13,1969	1330	850	24.1	3.97	1.210
	Nov. 26,1969	1300	946	26.8	4.18	1.274
	Nov. 28,1969	1330	*1,060	30.0	*4.44	1.353
1970	Sept.29,1970	2000	942	26.7	4.17	1.271
1971	Oct. 29,1970	--	*730	20.7	*3.70	1.128
1972	Sept.29,1972	0600	*1,180	33.4	*4.70	1.433
1973	Oct. 30,1972	1000	*1,040	29.5	*4.38	1.335
	Jan. 22,1973	1930	964	27.3	4.22	1.286
	Feb. 21,1973	1600	946	26.8	4.18	1.274
1974	May 4,1974	--	*675	19.1	*3.58	1.091
1975	Oct. 1,1974	0400	869	24.6	4.01	1.222
	Oct. 8,1974	0600	*1,220	34.6	*4.80	1.463
	Oct. 19,1974	--	960	27.2	4.21	1.283
1976	Jan. 30,1976	1915	*1,190	33.7	*4.73	1.442
1977	Nov. 3,1976	0630	*923	26.1	*4.13	1.259
1978	Jan. 23,1978	1930	*823	23.3	*3.91	1.192

a May be affected by ice.
b Control temporarily raised by embedded log.

15086600 BIG CREEK NEAR POINT BAKER--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	275	45	57	80	66	197	78	188	8.8	7.2	128	94
2	230	37	64	98	148	165	63	153	8.3	12	128	78
3	240	32	42	80	193	105	57	96	8.0	10	84	116
4	280	28	64	56	130	67	54	64	7.7	8.9	51	120
5	320	24	271	40	91	46	55	45	7.5	8.0	34	101
6	195	22	176	32	108	35	57	44	7.2	7.6	24	79
7	135	19	163	27	205	28	72	50	6.7	7.4	20	54
8	390	18	156	24	195	40	64	50	6.5	7.3	17	208
9	1100	17	89	25	127	56	52	40	6.3	7.6	15	309
10	660	16	58	18	77	40	45	31	6.2	7.3	13	150
11	475	14	79	21	54	34	52	26	6.0	7.1	12	89
12	520	14	50	19	41	28	82	23	5.8	6.9	11	58
13	380	56	41	17	34	26	73	20	6.4	8.8	10	41
14	180	366	38	19	28	22	61	19	7.4	10	28	32
15	95	269	30	19	23	19	83	17	7.3	10	52	26
16	76	168	29	18	21	50	250	15	8.0	9.5	90	22
17	66	152	109	17	17	55	192	15	8.1	9.5	107	18
18	58	141	245	15	17	47	163	14	7.6	9.7	51	42
19	51	273	280	14	15	106	146	14	7.1	30	34	121
20	45	308	275	15	14	165	126	20	6.8	65	25	50
21	38	219	240	32	22	215	129	26	6.5	57	21	43
22	34	186	200	200	42	235	232	23	6.8	55	18	70
23	32	115	115	145	37	195	193	19	8.0	51	17	54
24	32	77	72	97	36	141	118	16	7.9	39	15	49
25	29	94	75	59	43	115	81	15	7.4	40	18	197
26	30	90	172	40	63	141	60	13	7.1	28	25	101
27	36	59	330	36	89	116	58	12	7.0	22	19	94
28	50	45	325	31	92	151	83	11	7.0	19	18	92
29	72	29	220	21	136	111	75	10	6.6	23	136	246
30	67	29	182	18	---	95	135	9.8	6.5	47	88	211
31	52	---	106	18	---	91	---	9.6	---	169	56	---
TOTAL	6243	2962	4353	1351	2164	2937	2989	1108.4	214.5	799.8	1365	2965
MEAN	201	98.7	140	43.6	74.6	94.7	99.6	35.8	7.15	25.8	44.0	98.8
MAX	1100	366	330	200	205	235	250	188	8.8	169	136	309
MIN	29	14	29	14	14	19	45	9.6	5.8	6.9	10	18
CFSM	17.9	8.81	12.5	3.89	6.66	8.46	8.89	3.20	.64	2.30	3.93	8.82
IN.	20.73	9.84	14.46	4.49	7.19	9.75	9.93	3.68	.71	2.66	4.53	9.85
AC-FT	12380	5880	8630	2680	4290	5830	5930	2200	425	1590	2710	5880

CAL YR 1979 TOTAL 27098.0 MEAN 74.2 MAX 1100 MIN 13 CFSM 6.63 IN 90.00 AC-FT 53750
WTR YR 1980 TOTAL 29451.7 MEAN 80.5 MAX 1100 MIN 5.8 CFSM 7.19 IN 97.81 AC-FT 58420

15086600 BIG CREEK NEAR POINT BAKER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1963 to October 1971, March 1972 to November 1974, April 1975 to February 1976, June to October 1976, and February 1977 to May 1980.

INSTRUMENTATION.--Temperature recorder since Aug. 30, 1963.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C June 13, 1969; minimum 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, not determined; minimum, 0.0°C Jan. 17.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 21...	1530	38	169	7.7	8.0	9.6	60	0	23
JAN 24...	1020	98	85	7.6	1.5	16.1	60	--	23
APR 14...	1100	62	130	7.7	5.5	11.6	63	22	24
AUG 03...	1200	73	141	7.6	13.0	10.0	65	0	25

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 21...	.7	3.0	.3	89	0	1.0	12	.0	3.2
JAN 24...	.6	1.3	.3	--	--	4.0	2.9	.0	1.7
APR 14...	.8	1.4	.3	50	0	1.8	2.4	.0	1.8
AUG 03...	.7	1.4	.6	85	0	1.2	2.2	.1	1.7

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	SEDIMENT, SUS-PENDED (MG/L)	SEDIMENT DISCHARGE, SUS-PENDED (T/DAY)
OCT 21...	103	3.5	.040	.96	1.0	4.5	.020	4	.41
JAN 24...	--	.09	.010	.18	.19	.28	.010	1	.26
APR 14...	58	.16	.000	.30	.30	.46	.010	2	.33
AUG 03...	75	.11	.000	1.6	1.6	1.7	.030	1	.20

15086600 BIG CREEK NEAR POINT BAKER--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1979 TO MAY 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.5	10.0	7.5	6.0	4.5	4.0	3.0	2.5	2.0	1.5	3.5	3.0
2	10.5	10.0	6.5	5.5	4.5	4.0	3.0	2.5	2.5	2.0	4.0	3.0
3	10.0	9.5	6.5	4.5	5.0	4.5	2.5	2.5	2.5	2.0	3.5	2.5
4	10.0	9.5	6.0	5.5	5.0	4.5	2.5	1.5	2.5	2.0	3.5	2.0
5	10.0	9.5	5.5	4.0	5.5	5.0	1.5	1.0	3.0	2.5	4.0	1.5
6	10.5	9.5	4.5	3.0	5.0	4.5	2.0	1.5	3.0	2.5	4.0	2.0
7	10.0	9.0	4.5	2.5	4.5	4.0	2.0	.5	3.0	2.5	4.0	2.5
8	9.5	9.0	4.5	3.5	4.5	4.0	.5	.5	3.0	2.5	3.5	3.0
9	9.5	9.0	4.0	3.0	4.5	3.5	.5	.5	3.0	2.5	4.5	3.0
10	9.5	9.0	4.0	2.5	3.5	2.0	.5	.5	3.0	2.5	4.5	2.5
11	9.5	9.5	4.5	3.0	3.0	1.5	.5	.5	3.0	2.0	4.5	1.5
12	10.0	9.0	5.0	4.0	1.5	.5	.5	.5	3.0	2.0	4.0	1.0
13	9.5	9.0	5.5	5.0	.5	.5	.5	.5	3.0	1.5	4.5	.5
14	10.0	8.5	6.0	5.5	.5	.5	.5	.5	2.5	1.0	4.0	1.5
15	9.5	8.5	6.0	6.0	.5	.5	.5	.5	2.5	.5	4.0	1.5
16	9.0	8.0	6.5	6.0	.5	.5	.5	.5	2.0	.5	3.0	2.0
17	9.0	8.0	6.0	5.5	2.0	.5	.5	.0	1.5	.5	4.5	2.5
18	9.0	8.0	5.5	5.0	2.5	2.0	.5	.5	2.5	1.0	3.5	2.0
19	9.0	7.5	6.0	5.0	3.0	2.5	.5	.5	2.5	1.5	3.0	1.5
20	8.0	6.5	6.0	5.5	3.0	3.0	.5	.5	2.0	1.0	4.0	3.0
21	8.5	7.5	6.5	6.0	3.0	2.0	1.0	.5	2.5	1.0	3.5	3.0
22	8.5	7.5	6.0	5.5	2.5	1.5	1.5	.5	3.0	1.5	4.0	3.0
23	8.5	8.0	6.0	5.0	2.5	2.5	2.0	1.5	4.0	2.0	4.5	3.0
24	9.0	7.0	5.5	5.0	2.5	2.0	2.0	1.5	3.0	2.0	3.5	3.0
25	8.0	6.5	5.0	4.5	2.5	2.0	1.5	1.0	3.5	3.0	4.0	3.0
26	8.0	7.0	5.0	4.0	2.5	2.0	1.0	.5	3.5	3.0	5.0	3.0
27	8.0	7.5	4.5	3.5	3.0	2.0	.5	.5	4.0	3.0	4.0	3.5
28	8.0	7.5	5.0	4.5	3.0	2.5	1.5	.5	4.0	3.0	4.0	3.0
29	8.0	7.5	5.0	5.0	3.0	2.5	2.0	.5	3.5	3.0	5.5	3.0
30	8.5	7.5	5.0	4.5	2.5	2.0	2.0	1.0	---	---	3.5	2.5
31	8.0	7.5	---	---	2.5	2.5	2.0	1.5	---	---	5.5	3.0
MONTH	10.5	6.5	7.5	2.5	5.5	.5	3.0	.0	4.0	.5	5.5	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	3.0	7.0	6.0								
2	6.5	3.0	8.0	6.0								
3	7.0	3.0	8.5	5.5								
4	7.0	3.5	9.5	6.0								
5	6.5	4.5	9.0	7.0								
6	7.0	4.5	8.0	7.0								
7	6.5	4.5	7.5	7.0								
8	7.5	4.0	9.5	7.0								
9	7.5	4.5	12.5	6.5								
10	7.5	4.5	13.5	7.5								
11	5.5	5.0	14.5	8.0								
12	7.5	5.0	15.5	9.0								
13	8.0	4.5	11.5	10.0								
14	6.0	5.0	14.0	9.5								
15	5.5	5.0	16.0	8.0								
16	5.0	4.5	13.0	10.5								
17	5.5	5.0	11.5	9.5								
18	5.5	5.0	11.5	9.5								
19	6.0	5.0	10.0	8.5								
20	5.5	5.0	10.0	8.0								
21	5.5	5.0	11.0	8.0								
22	5.5	5.0	13.0	7.5								
23	6.0	4.5	15.5	8.0								
24	6.5	5.0	---	---								
25	7.0	5.5	---	---								
26	9.0	5.5	---	---								
27	7.0	6.0	---	---								
28	7.0	5.5	---	---								
29	6.5	5.5	---	---								
30	7.0	6.0	---	---								
31	---	---	---	---								
MONTH	9.0	3.0										

15086960 SUNRISE LAKE OUTLET NEAR WRANGELL

LOCATION.--Lat 56°24'44", long 132°29'30", in NE¼NW¼ sec.17, T.63 S., R.83 E., Hydrologic Unit 19060000, on Woronkofski Island, in Tongass National Forest, on left bank of lake outlet and 5.0 mi (8.0 km) southwest of Wrangell.

DRAINAGE AREA.--1.17 mi² (3.03 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1977 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (594 m), from topographic map.

REMARKS.--Records good. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 474 ft³/s (13.4 m³/s) Oct. 9, 1979, gage height, 4.60 ft (1.402 m), from rating curve extended above 20 ft³/s (0.57 m³/s); minimum daily, 0.93 ft³/s (0.026 m³/s) Feb. 24-28, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 474 ft³/s (13.4 m³/s) Oct. 9, gage height, 4.60 ft (1.402 m); minimum daily, 1.8 ft³/s (0.051 m³/s) Nov. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	6.3	3.7	11	7.7	15	6.7	43	20	9.3	36	13
2	14	5.1	3.3	10	8.5	11	6.2	34	15	13	31	9.9
3	28	4.1	3.2	9.9	10	8.4	5.9	15	19	11	14	7.7
4	25	3.5	3.0	8.6	8.8	6.8	5.7	10	27	9.5	11	10
5	43	3.1	17	7.4	7.2	5.5	5.7	10	39	9.1	8.4	9.9
6	15	2.7	22	7.1	10	5.1	6.1	17	36	7.8	6.3	8.6
7	8.4	2.4	10	6.5	14	4.5	9.0	25	32	6.8	5.1	6.8
8	7.6	2.3	8.7	5.9	14	4.2	7.5	23	32	6.2	4.3	23
9	285	2.1	7.6	5.4	9.8	3.7	4.4	20	29	6.2	4.0	42
10	51	2.1	6.0	5.0	8.2	3.5	3.4	19	23	6.3	3.5	14
11	20	1.9	5.7	4.8	7.4	3.3	5.0	20	25	5.8	3.2	8.7
12	31	1.8	4.5	4.9	6.4	3.1	6.7	20	25	5.5	2.9	6.5
13	15	12	4.0	5.4	5.5	2.8	6.7	23	54	6.5	2.6	5.2
14	9.6	312	3.7	7.0	5.3	2.5	6.3	19	43	12	5.1	4.5
15	6.8	21	3.2	8.7	4.9	2.4	10	18	32	9.5	7.5	3.9
16	5.4	11	8.9	9.2	4.8	4.8	12	20	24	7.1	20	3.6
17	5.8	12	8.4	8.6	4.6	7.9	10	29	20	6.1	26	3.4
18	4.9	8.0	10	7.2	4.3	8.3	9.7	26	15	5.4	11	4.3
19	4.1	8.8	27	8.0	4.0	8.2	11	24	14	12	7.8	21
20	3.5	32	26	8.7	3.8	8.3	9.1	19	13	33	6.9	13
21	3.6	55	23	8.1	3.7	8.4	12	13	13	15	5.6	8.6
22	3.3	50	15	15	3.6	13	24	11	16	16	4.7	12
23	3.6	15	12	35	3.5	9.5	22	11	18	19	5.8	9.6
24	4.0	8.9	9.7	25	3.2	6.2	13	13	16	14	6.7	7.6
25	3.6	8.9	11	17	3.5	6.1	9.1	17	15	13	6.0	12
26	3.5	7.3	14	12	4.8	6.1	11	20	15	12	7.0	10
27	6.5	5.3	23	9.3	7.5	5.5	16	23	13	8.9	5.9	11
28	8.5	3.9	35	8.6	9.0	7.8	14	21	10	7.2	4.7	15
29	12	3.3	28	3.9	11	7.6	12	17	8.7	13	6.9	33
30	11	3.3	16	4.7	---	7.2	14	18	8.6	22	7.3	19
31	7.6	---	12	4.3	---	7.7	---	28	---	43	6.2	---
TOTAL	675.3	615.1	384.6	292.2	199.0	204.4	294.2	626	670.3	371.2	283.4	356.8
MEAN	21.8	20.5	12.4	9.43	6.86	6.59	9.81	20.2	22.3	12.0	9.14	11.9
MAX	285	312	35	35	14	15	24	43	54	43	36	42
MIN	3.3	1.8	3.0	3.9	3.2	2.4	3.4	10	8.6	5.4	2.6	3.4
CFSM	18.6	17.5	10.6	8.06	5.86	5.63	8.39	17.3	19.1	10.3	7.81	10.2
IN.	21.45	19.54	12.22	9.28	6.32	6.49	9.35	19.89	21.29	11.79	9.00	11.33
AC-FT	1340	1220	763	580	395	405	584	1240	1330	736	562	708

CAL YR 1979 TOTAL 4309.48 MEAN 11.8 MAX 312 MIN .93 CFSM 10.1 IN 136.90 AC-FT 8550
WTR YR 1980 TOTAL 4972.50 MEAN 13.6 MAX 312 MIN 1.8 CFSM 11.6 IN 157.97 AC-FT 9860

15086960 SUNRISE LAKE OUTLET NEAR WRANGELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN								
28...	1215	3.9	15	6.3	13.0	6	1	1.9

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JAN									
28...	.3	.9	.2	6	.3	1.2	.0	1.0	9

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN								
28...	.02	.030	.26	.29	.31	.030	1	.01

15087545 MUNICIPAL WATERSHED CREEK NEAR PETERSBURG

LOCATION.--Lat 56°46'42", long 132°55'00", in NE¼NW¼NE¼ sec.11, T.59 S., R.79 E., Hydrologic Unit 19060000, on Mitkof Island, in Tongass National Forest, on left bank 0.5 mi (0.8 km) upstream from the Petersburg reservoir, 2.2 mi (3.5 km) upstream from mouth, and 2.3 mi (3.7 km) southeast of Petersburg.

DRAINAGE AREA.--2.20 mi² (5.70 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (120 m), from topographic map.

REMARKS.--Water-discharge records poor. Discharge measurements for period prior to 1979 water year are published as miscellaneous measurements in this publication.

COOPERATION.--Gage-height record and thirty-five discharge measurements collected prior to 1980 water year were furnished by U.S. Forest Service.

EXTREMES FOR CURRENT PERIOD.--Water year 1979: Maximum discharge, 668 ft³/s (18.9 m³/s) Oct. 30, gage height, 4.00 ft (1.219 m); from rating curve extended above 140 ft³/s (4.0 m³/s) on basis of slope-area measurement at gage height 3.72 ft (1.134 m), from floodmarks; minimum daily, 0.60 ft³/s (0.017 m³/s) Aug. 24-28.

Water year 1980: Maximum discharge, 525 ft³/s (14.9 m³/s) Oct. 9, gage height, 3.72 ft (1.134 m), from floodmarks, from slope-area measurement of peak discharge; minimum daily, 0.84 ft³/s (0.024 m³/s) Nov. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	90	6.0	2.0	1.6	3.5	1.9	28	92	11	13	6.3
2	143	60	91	1.9	1.9	5.0	1.9	52	70	11	41	6.5
3	68	28	31	1.8	2.3	9.0	1.9	75	39	9.1	9.7	3.5
4	10	13	8.5	1.7	2.9	13	1.9	51	46	9.1	5.5	2.9
5	5.5	18	6.1	1.6	3.9	20	13	40	45	7.9	2.6	1.4
6	22	37	4.3	1.6	5.5	35	11	57	32	7.2	1.8	1.2
7	14	20	7.9	1.4	8.4	94	10	73	30	10	1.5	.99
8	50	11	69	1.3	12	21	9.3	57	27	6.9	1.4	.92
9	36	5.1	34	1.4	17	17	8.1	23	41	9.4	1.2	1.2
10	30	2.2	11	1.6	2.3	19	7.4	39	22	7.6	1.1	5.1
11	18	2.5	6.8	1.5	1.8	24	7.0	52	20	6.9	.93	2.7
12	20	1.8	7.3	1.6	1.6	25	7.4	30	19	5.5	.86	43
13	234	1.7	23	1.4	1.5	14	8.2	30	18	5.7	.80	140
14	18	2.4	11	1.1	1.4	31	7.3	24	40	3.8	.75	17
15	21	7.0	7.0	2.6	1.3	17	7.8	21	38	2.8	.74	33
16	7.7	2.8	8.2	5.4	1.3	8.8	9.0	26	21	5.0	.74	23
17	103	11	11	12	1.3	7.4	7.6	58	18	19	.74	14
18	178	1.9	7.1	17	1.3	9.7	7.8	37	19	13	.74	2.4
19	18	7.0	7.2	28	1.4	13	9.3	34	18	43	.72	1.7
20	15	16	11	11	1.4	25	11	29	17	52	.70	1.4
21	11	14	8.0	6.3	1.5	16	13	28	15	48	.66	1.5
22	106	14	6.1	3.4	1.6	10	18	81	15	32	.62	4.9
23	56	22	5.1	2.8	1.5	9.8	27	113	15	12	.62	16
24	40	43	4.3	2.3	1.4	9.8	30	73	15	6.5	.60	9.6
25	164	46	3.6	2.1	1.4	8.3	26	87	13	3.4	.60	14
26	15	104	3.2	1.9	1.5	6.8	27	77	12	1.9	.60	13
27	18	189	2.8	1.7	1.7	5.3	42	42	10	1.5	.60	43
28	7.7	28	2.6	1.5	2.0	3.8	68	25	9.7	1.4	.60	7.8
29	8.1	12	2.5	1.4	---	2.9	66	29	35	1.2	.62	3.4
30	287	8.5	2.2	1.4	---	2.4	55	27	19	2.3	.62	31
31	205	---	2.1	1.5	---	2.1	---	47	---	45	.80	---
TOTAL	1942.0	818.9	410.9	124.2	84.7	488.6	520.8	1465	830.7	401.1	93.46	452.41
MEAN	62.6	27.3	13.3	4.01	3.03	15.8	17.4	47.3	27.7	12.9	3.01	15.1
MAX	287	189	91	28	17	94	68	113	92	52	41	140
MIN	5.5	1.7	2.1	1.1	1.3	2.1	1.9	21	9.7	1.2	.60	.92
CFSM	28.5	12.4	6.05	1.82	1.38	7.18	7.91	21.5	12.6	5.86	1.37	6.86
IN.	32.82	13.84	6.94	2.10	1.43	8.26	8.80	24.76	14.04	6.78	1.58	7.65
AC-FT	3850	1620	815	246	168	969	1030	2910	1650	796	185	897

WTR YR 1979 TOTAL 7632.77 MEAN 20.9 MAX 287 MIN .60 CFSM 9.50 IN 129.00 AC-FT 15140

15087545 MUNICIPAL WATERSHED CREEK NEAR PETERSBURG--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	3.7	17	19	65	87	6.1	137	30	6.5	62	18
2	2.2	2.0	5.2	22	59	44	11	40	34	12	22	20
3	114	1.6	2.5	27	39	17	16	17	25	4.6	10	33
4	85	1.5	6.7	13	17	21	20	14	25	2.9	8.0	25
5	56	1.3	114	8.0	16	9.6	23	21	28	2.2	4.8	19
6	36	1.2	15	6.0	35	6.2	25	47	31	1.9	3.0	12
7	20	1.0	7.8	5.2	108	4.2	32	35	37	1.7	2.2	23
8	260	.97	19	5.0	22	4.9	16	34	23	2.0	2.1	50
9	360	.92	7.2	5.6	9.7	11	13	28	37	2.4	2.0	82
10	105	.91	2.9	3.8	6.5	6.1	17	30	38	2.2	1.7	34
11	54	.88	10	5.0	5.7	5.2	102	30	22	1.7	1.5	21
12	140	.84	8.2	3.6	4.0	12	101	28	17	1.5	1.4	15
13	55	35	7.2	3.2	3.5	13	22	28	19	7.5	1.6	9.0
14	27	256	5.0	4.8	9.8	13	21	24	22	20	17	7.0
15	11	16	3.8	4.2	3.7	4.5	35	22	25	7.9	15	5.0
16	6.6	47	6.0	3.7	3.4	2.4	70	30	24	4.0	90	3.3
17	4.5	48	15	3.3	2.7	3.6	35	37	24	3.2	28	10
18	2.2	11	30	2.8	2.4	3.2	34	22	14	2.4	6.3	18
19	1.8	43	88	2.3	1.8	29	36	32	14	53	6.3	30
20	1.5	84	68	2.1	1.6	48	28	38	20	50	9.2	9.5
21	1.6	84	50	6.0	1.6	63	41	24	22	20	4.8	13
22	1.3	25	34	49	3.9	61	87	17	13	24	3.4	16
23	1.9	8.5	21	33	4.8	14	25	18	12	17	4.0	11
24	1.6	3.2	10	28	10	7.7	20	21	8.0	9.8	3.7	23
25	1.4	5.0	25	10	17	6.9	21	25	7.6	10	6.8	50
26	1.9	3.3	62	7.3	22	10	27	18	5.5	9.1	5.8	19
27	3.2	2.0	94	6.6	21	12	44	55	5.0	6.7	3.7	18
28	12	1.7	74	5.8	18	12	41	31	3.4	4.5	14	17
29	12	1.8	52	1.6	35	6.5	33	33	2.8	20	40	73
30	9.0	8.7	34	1.4	---	4.4	85	29	2.2	29	18	48
31	2.7	---	21	1.3	---	5.2	---	32	---	105	22	---
TOTAL	1396.6	700.02	915.5	299.6	549.1	547.6	1087.1	997	590.5	444.7	420.3	731.8
MEAN	45.1	23.3	29.5	9.66	18.9	17.7	36.2	32.2	19.7	14.3	13.6	24.4
MAX	360	256	114	49	108	87	102	137	38	105	90	82
MIN	1.3	.84	2.5	1.3	1.6	2.4	6.1	14	2.2	1.5	1.4	3.3
CFSM	20.5	10.6	13.4	4.39	8.59	8.05	16.5	14.6	8.96	6.50	6.18	11.1
IN.	23.60	11.83	15.47	5.06	9.28	9.26	18.37	16.85	9.98	7.52	7.10	12.37
AC-FT	2770	1390	1820	594	1090	1090	2160	1980	1170	882	834	1450

CAL YR 1979 TOTAL 7473.09 MEAN 20.5 MAX 360 MIN .60 CFSM 9.32 IN 126.31 AC-FT 14820
WTR YR 1980 TOTAL 8679.82 MEAN 23.7 MAX 360 MIN .84 CFSM 10.8 IN 146.70 AC-FT 17220

NOTE.--No gage-height record Oct. 4-18, Dec. 11 to Jan. 29, and Aug. 25 to Sept. 30.

15087545 MUNICIPAL WATERSHED CREEK NEAR PETERSBURG--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 29...	1600	2.0	24	6.3	--	13.0	10	7	2.9
APR 15...	1400	35	13	6.3	1.5	12.6	2	0	.8
AUG 01...	1515	69	11	5.1	10.5	10.0	4	2	1.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JAN 29...	.6	1.0	.7	4	0	1.0	1.7	.0	3.5
APR 15...	.1	.6	.2	3	0	1.9	.6	.1	1.8
AUG 01...	.3	.6	.3	3	0	2.3	.6	.1	2.4

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN 29...	14	.06	.030	.49	.52	.58	.010	1	.01
APR 15...	8	.00	.000	.83	.83	.83	.020	3	.29
AUG 01...	9	.00	.000	.25	.25	.25	.040	5	.93

15087570 HAMILTON CREEK NEAR KAKE

LOCATION.--Lat 56°52'21", long 133°40'30", in SE¼NE¼ sec.1, T.58 S., R.74 E., Hydrologic Unit 19060000, on Kupreanof Island, in Tongass National Forest, 2.9 mi (4.7 km) upstream from mouth at Hamilton Bay and 12 mi (19 km) southeast of Kake.

DRAINAGE AREA.--65.0 mi^2 (168.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximums, water years 1972-73 and 1975-76. October 1976 to current year.

REVISED RECORDS.--WDR AK-79-1: 1976 (M).

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (8 m), from topographic map. Prior to October 1976, crest-stage gage at same datum and different site.

REMARKS.--Records fair except those for periods of no gage-height record, Jan. 7 to Apr. 8 and June 17 to July 31, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft^3/s (442 m^3/s) Jan. 30, 1976, gage height, 14.97 ft (4.563 m), from floodmarks, from rating curve extended above 780 ft^3/s (22 m^3/s) on basis of slope-area measurement at gage height 13.36 ft (4.072 m), minimum daily, 11 ft^3/s (0.31 m^3/s) Aug. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,600 ft^3/s (272 m^3/s) Oct. 3, gage height, 13.36 ft (4.072 m), from rating curve extended as explained above; minimum daily, 19 ft^3/s (0.54 m^3/s) June 11.

REVISIONS.--The maximum discharges for water years 1977 and 1978 have been revised to 12,000 ft^3/s (340 m^3/s) Oct. 26, 1976, gage height, 14.06 ft (4.285 m), and 6,410 ft^3/s (182 m^3/s) Oct. 11, 1977, gage height, 12.25 ft (3.734 m), superseding figures published in the reports for 1977 and 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	130	679	148	600	1700	450	1460	43	80	711	193
2	495	115	253	162	1200	1320	410	676	37	98	757	197
3	3180	102	156	135	1530	975	350	242	36	83	237	179
4	1240	102	140	115	950	700	360	153	32	71	179	937
5	2220	72	365	398	620	440	410	117	31	62	122	355
6	414	77	325	536	900	280	370	105	29	57	88	503
7	191	71	162	400	1520	220	280	128	26	53	69	222
8	138	63	256	210	400	290	215	163	24	45	61	349
9	5150	61	195	158	270	430	176	145	24	43	58	923
10	1720	58	130	160	200	330	152	104	22	38	53	223
11	685	57	125	120	160	225	1110	85	19	35	48	123
12	713	115	498	145	135	190	2150	72	22	36	43	90
13	336	2700	320	118	116	168	436	65	95	55	57	71
14	302	995	225	108	95	160	320	58	368	68	129	62
15	230	570	185	125	86	335	1480	59	451	63	396	56
16	172	1360	155	118	80	350	2530	59	283	59	415	51
17	232	480	380	98	75	380	1370	60	145	220	1010	49
18	187	2130	650	80	72	525	1420	55	90	320	229	48
19	139	2110	1400	72	72	850	1190	124	65	490	123	863
20	115	2640	2000	140	200	1150	670	302	80	440	116	342
21	115	1980	600	400	265	1700	614	289	95	390	86	140
22	112	1050	312	1400	275	2100	1710	267	113	365	68	213
23	138	268	185	950	270	1520	909	135	95	340	66	165
24	217	164	135	600	320	1150	304	87	85	315	91	114
25	142	191	967	210	390	850	276	66	76	250	74	254
26	116	224	959	150	470	980	253	57	70	225	98	176
27	193	159	1770	125	650	900	437	51	63	185	87	134
28	260	118	4370	95	950	1010	497	45	58	98	67	285
29	220	100	1300	80	1100	730	301	39	60	83	331	2020
30	164	282	295	110	---	600	878	38	64	90	263	814
31	253	---	176	280	---	520	---	42	---	546	134	---
TOTAL	21219	18544	19668	7946	13971	23078	22028	5348	2701	5303	6266	10151
MEAN	684	618	634	256	482	744	734	173	90.0	171	202	338
MAX	5150	2700	4370	1400	1530	2100	2530	1460	451	546	1010	2020
MIN	112	57	125	72	72	160	152	38	19	35	43	48
CFSM	10.5	9.51	9.75	3.94	7.42	11.4	11.3	2.66	1.39	2.63	3.11	5.20
IN.	12.14	10.61	11.26	4.55	8.00	13.21	12.61	3.06	1.55	3.03	3.59	5.81
AC-FT	42090	36780	39010	15760	27710	45780	43690	10610	5360	10520	12430	20130

CAL YR 1979 TOTAL 106100 MEAN 291 MAX 5150 MIN 29 CFSM 4.48 IN 60.72 AC-FT 210400
WTR YR 1980 TOTAL 156223 MEAN 427 MAX 5150 MIN 19 CFSM 6.57 IN 89.41 AC-FT 309900

15087570 HAMILTON CREEK NEAR KAKE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
JAN											
20...	1330	47	44	6.4	22	6.1	1.6	2.5	.3	2.5	3.0
JUL											
31...	1200	575	--	--	--	--	--	--	--	--	--

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JAN										
20...	.0	5.0	.27	.030	.32	.35	.62	.010	2	.25
JUL										
31...	--	--	--	--	--	--	--	--	4	6.2

15087590 ROCKY PASS CREEK NEAR POINT BAKER

LOCATION.--Lat 56°37'10" (revised), long 133°44'10", in SW¼SE¼ sec.34, T.60 S., R.74 E., Hydrologic Unit 19060000, on Kuiu Island, in Tongass National Forest, on left bank 0.5 mi (0.8 km) upstream from mouth and 22 mi (35 km) northwest of Point Baker.

DRAINAGE AREA.--3.27 mi^2 (8.47 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WDR AK-79-1: 1977-78 (M).

GAGE.--Water-stage recorder. Altitude of gage is 65 ft (19.8 m), from topographic map.

REMARKS.--Water-discharge records fair except those for December and January, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) Oct. 9, 1979, gage height, 6.15 ft (1.874 m) from rating curve extended above 50 ft^3/s (1.4 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 0.02 ft^3/s (0.001 m^3/s) Nov. 27, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft^3/s (25.3 m^3/s) Oct. 9, gage height, 6.15 ft (1.874 m); from rating curve extended as explained above; minimum daily, 0.02 ft^3/s (0.001 m^3/s) Nov. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	1.8	14	3.8	2.0	43	6.2	35	1.0	2.0	21	4.8
2	57	2.0	3.1	3.2	6.0	19	4.4	11	.91	3.7	12	2.4
3	179	2.2	2.5	2.7	11	7.6	3.9	6.0	.69	2.7	4.4	6.4
4	37	2.5	3.9	2.4	12	5.0	3.8	3.7	.51	2.1	3.4	5.1
5	87	2.2	71	2.2	3.6	4.7	4.1	2.9	.44	1.8	2.7	7.4
6	8.9	2.0	2.4	2.0	8.0	3.2	4.1	2.8	.37	1.3	2.3	3.3
7	5.2	1.8	3.1	1.9	18	2.7	4.6	3.2	.33	1.2	2.0	1.7
8	27	1.8	3.9	1.8	13	5.8	3.9	3.3	.30	1.0	2.0	14
9	894	1.8	.69	7.0	5.4	8.4	3.3	2.7	.27	1.0	1.9	8.2
10	21	1.8	.40	1.6	5.8	4.4	3.0	2.3	.27	.79	1.8	1.8
11	36	1.7	3.2	1.5	5.3	4.0	17	2.0	.27	.60	1.3	.40
12	19	1.8	4.2	1.4	3.9	3.4	35	1.8	.27	.51	.60	.15
13	12	17	2.7	1.4	3.2	2.7	6.9	1.7	2.6	1.7	.44	.03
14	13	55	1.7	1.3	3.1	2.8	15	1.5	12	3.1	4.5	.33
15	6.2	20	1.1	1.2	2.7	2.4	23	1.3	5.7	2.7	3.8	.91
16	5.2	20	1.3	1.2	2.5	12	41	1.2	5.0	2.1	17	1.9
17	18	16	1.7	1.2	2.5	11	25	1.3	3.9	1.8	10	.30
18	6.6	9.2	7.0	1.2	2.4	9.0	12	1.5	2.8	1.7	2.7	3.6
19	4.0	34	20	1.3	2.2	26	11	1.8	2.3	20	2.1	18
20	3.5	20	72	1.5	2.1	43	9.5	2.9	1.9	23	.60	1.8
21	3.5	17	45	4.3	2.5	54	14	2.8	1.8	8.7	.91	2.4
22	3.1	10	31	11	47	32	46	2.8	9.6	15	1.9	5.2
23	4.5	2.7	23	68	27	8.1	20	2.1	17	7.1	1.9	1.7
24	3.9	1.2	21	50	31	4.8	7.9	1.8	4.2	6.1	.44	2.9
25	2.9	2.2	19	23	29	12	6.5	1.5	2.8	6.4	2.1	15
26	3.0	1.3	18	12	31	14	5.3	1.2	2.4	4.5	2.6	2.7
27	4.0	.02	16	8.4	14	12	16	1.0	2.6	3.9	1.7	3.2
28	4.0	.24	15	6.2	14	22	17	.79	2.2	3.0	1.5	6.3
29	5.2	1.2	10	4.8	19	8.1	7.4	.79	2.0	8.2	21	24
30	4.3	4.5	6.4	3.8	---	7.9	34	.91	1.8	23	3.4	8.5
31	2.2	---	5.0	2.7	---	11	---	1.7	---	31	3.1	---
TOTAL	1530.2	256.96	429.29	236.0	329.2	406.0	410.8	107.29	88.23	191.70	137.09	154.42
MEAN	49.4	8.57	13.8	7.61	11.4	13.1	13.7	3.46	2.94	6.18	4.42	5.15
MAX	894	55	72	68	47	54	46	35	17	31	21	24
MIN	2.2	.02	.40	1.2	2.0	2.4	3.0	.79	.27	.51	.44	.03
CFSM	15.1	2.62	4.22	2.33	3.49	4.01	4.19	1.06	.90	1.89	1.35	1.58
IN.	17.40	2.92	4.88	2.68	3.74	4.62	4.67	1.22	1.00	2.18	1.56	1.76
AC-FT	3040	510	851	468	653	805	815	213	175	380	272	306

CAL YR 1979 TOTAL 7161.65 MEAN 19.6 MAX 894 MIN .02 CFSM 5.99 IN 81.45 AC-FT 14210
WTR YR 1980 TOTAL 4277.18 MEAN 11.7 MAX 894 MIN .02 CFSM 3.58 IN 48.64 AC-FT 8480

15087590 ROCKY PASS CREEK NEAR POINT BAKER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV									
03...	1530	2.2	23	6.0	4.0	12.2	5	2	1.2
JAN									
21...	1510	4.4	25	5.0	.0	12.8	5	1	1.3
APR									
09...	1400	2.7	20	5.7	4.5	12.0	3	2	.7
JUL									
25...	1300	8.7	20	5.3	13.0	10.2	5	3	1.2

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV									
03...	.4	1.9	.1	3	0	6.4	3.5	.0	4.4
JAN									
21...	.4	2.3	.2	5	0	3.4	3.7	.0	4.6
APR									
09...	.4	1.7	.1	2	0	2.8	2.1	.0	3.5
JUL									
25...	.5	1.7	.2	2	0	3.7	1.5	.1	3.7

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV									
03...	19	.00	.030	.43	.46	.46	.000	1	.01
JAN									
21...	19	.05	.010	.21	.22	.27	.020	2	.02
APR									
09...	12	.00	.220	.19	.41	.41	.010	--	--
JUL									
25...	14	.05	.010	.58	.59	.64	.030	2	.05

15087610 NAKWASINA RIVER NEAR SITKA

LOCATION.--Lat 57°15'37", long 135°19'54", in NW¼SW¼ sec.24, T.53 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, on left bank 0.7 mi (1.1 km) upstream from mouth at Nakwasina Bay and 15 mi (24.1 km) north of Sitka.

DRAINAGE AREA.--31.9 mi² (82.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WDR AK-79-1: 1977-78.

GAGE.--Water-stage recorder. Altitude of gage 20 ft (6.1 m), from topographic map.

REMARKS.--Water-discharge records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,300 ft³/s (178 m³/s), Oct. 9, 1979, gage height, 8.81 ft (2.685 m), from floodmarks, from rating curve extended above 640 ft³/s (18 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 33 ft³/s (0.93 m³/s), Jan. 17-18, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (26.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 3	1330	2,060	58.3	5.13	1.564	Aug. 16	2100	1,310	37.1	4.10	1.250
Oct. 5	0300	2,880	81.6	6.04	1.841	Sept.24	2200	1,490	42.2	4.37	1.332
Oct. 9	0730	*6,300	178	*8.81	2.685						

Minimum daily discharge, 81 ft³/s (2.29 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	717	290	239	138	125	183	104	263	435	308	505	265
2	634	254	211	138	160	179	102	268	390	329	456	244
3	1650	226	190	138	183	164	101	241	393	329	490	271
4	1070	204	206	126	160	151	99	224	475	323	505	305
5	1680	188	561	119	154	144	104	239	577	317	400	293
6	862	175	363	117	151	136	111	265	569	311	344	290
7	688	164	288	114	293	130	116	279	528	299	311	268
8	648	156	290	104	236	130	117	288	494	302	332	400
9	3300	147	247	102	202	134	117	285	445	305	335	445
10	650	140	229	97	181	126	117	296	393	293	302	329
11	552	134	224	93	168	117	125	299	386	293	276	285
12	442	128	190	88	164	114	166	302	435	351	260	247
13	383	158	164	85	166	109	162	305	581	373	273	224
14	383	438	151	85	162	105	158	276	497	380	276	209
15	326	414	145	85	147	102	156	276	431	367	249	206
16	311	370	138	85	140	101	156	293	386	393	628	326
17	383	354	136	85	130	101	166	311	363	383	594	285
18	317	299	296	84	123	102	162	296	335	351	400	288
19	271	435	400	81	116	107	162	290	326	344	467	367
20	241	681	344	84	114	107	156	282	320	348	442	288
21	221	490	296	88	109	114	162	265	323	335	357	273
22	211	456	254	254	151	130	192	249	393	357	305	494
23	273	341	221	273	125	117	177	247	386	400	288	421
24	260	285	199	216	121	111	166	263	383	377	263	525
25	239	244	195	188	119	107	168	285	373	351	247	494
26	219	216	192	166	126	105	188	299	367	329	234	320
27	216	195	188	154	138	105	221	323	344	314	219	276
28	224	179	188	144	140	104	214	344	323	341	211	296
29	265	166	168	134	147	104	206	335	314	383	234	431
30	285	204	156	125	---	104	234	357	308	380	234	478
31	285	---	144	119	---	104	---	467	---	407	226	---
TOTAL	18206	8131	7213	3909	4451	3747	4585	9012	12263	10673	10663	9843
MEAN	587	271	233	126	153	121	153	291	409	344	344	328
MAX	3300	681	561	273	293	183	234	467	581	407	628	525
MIN	211	128	136	81	109	101	99	224	308	293	211	206
CFSM	18.4	8.50	7.30	3.95	4.80	3.79	4.80	9.12	12.8	10.8	10.8	10.3
IN.	21.23	9.48	8.41	4.56	5.19	4.37	5.35	10.51	14.30	12.45	12.43	11.48
AC-FT	36110	16130	14310	7750	8830	7430	9090	17880	24320	21170	21150	19520

CAL YR 1979 TOTAL 119355 MEAN 327 MAX 3300 MIN 34 CFSM 10.3 IN 139.18 AC-FT 236700
WTR YR 1980 TOTAL 102696 MEAN 281 MAX 3300 MIN 81 CFSM 8.81 IN 119.75 AC-FT 203700

15087610 NAKWASINA RIVER NEAR SITKA--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1976 to current year.

INSTRUMENTATION.--Temperature recorder since Sept. 4, 1976.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 10.5°C Sept. 13, 1979; minimum, 0.5°C Feb. 14, 15, 1979, and Jan. 22, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 10.0°C Oct. 9; minimum, 0.5°C Jan. 22.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.5	6.0	5.5	5.5	5.0	4.5	4.5	4.0	3.5	4.0	3.5
2	7.5	7.0	6.0	5.5	5.0	5.0	4.5	4.0	4.0	3.0	4.0	3.5
3	8.0	7.0	6.0	5.5	5.5	5.0	4.5	3.5	3.5	3.0	3.5	3.0
4	8.0	7.0	6.0	5.5	5.5	5.0	4.0	3.5	4.0	3.5	4.0	3.0
5	8.5	7.0	6.0	5.5	5.0	4.0	4.0	3.5	4.0	4.0	4.5	3.5
6	7.5	6.5	5.5	5.5	4.5	4.0	4.5	4.0	4.5	3.5	4.5	3.5
7	7.0	6.0	6.0	5.5	5.0	4.5	4.5	3.0	3.5	2.0	4.0	3.5
8	7.5	7.0	6.5	6.0	4.5	4.0	3.5	2.5	3.0	3.0	4.0	3.5
9	10.0	8.0	6.5	6.0	4.5	4.5	3.5	3.0	4.0	3.0	4.5	3.5
10	8.0	7.5	6.5	6.0	4.5	4.0	3.5	2.0	4.0	3.5	4.5	3.5
11	8.5	7.5	6.5	6.0	4.5	3.5	2.5	2.0	4.0	3.5	4.5	3.0
12	8.5	7.0	6.5	6.0	3.5	3.0	3.0	2.5	4.0	3.5	4.5	3.5
13	7.0	6.5	6.0	6.0	3.5	3.0	3.5	2.5	4.0	3.5	4.5	3.0
14	7.0	6.5	6.5	6.0	3.5	3.5	4.0	3.5	3.5	3.0	4.5	3.0
15	7.0	6.0	6.0	6.0	4.0	3.5	3.5	2.5	3.5	3.0	4.0	3.0
16	7.0	6.5	6.0	5.5	4.5	4.0	3.5	3.0	4.0	3.0	4.5	3.5
17	7.0	6.5	5.5	4.5	5.0	4.5	4.0	3.0	4.0	3.0	4.0	3.0
18	6.5	6.5	5.5	4.5	4.5	2.5	4.0	3.5	4.0	3.5	4.0	3.0
19	6.5	6.0	5.5	4.5	3.5	3.0	4.0	4.0	4.0	3.5	3.5	3.0
20	6.5	6.0	5.0	4.5	4.0	3.0	4.0	3.5	4.0	3.5	4.5	3.5
21	6.5	6.0	5.5	5.0	3.5	3.5	4.0	3.5	4.5	3.5	4.5	3.5
22	7.0	6.5	5.5	5.0	4.0	3.0	3.5	.5	4.0	2.5	4.0	3.5
23	7.0	6.5	5.0	5.0	4.5	4.0	2.5	2.0	4.5	3.5	4.5	3.5
24	7.0	6.5	5.5	5.0	4.5	4.0	3.0	3.0	4.0	4.0	4.5	3.0
25	7.0	6.0	5.5	5.5	4.5	3.5	3.0	2.5	4.5	3.5	4.5	3.5
26	7.0	6.5	5.0	5.0	4.5	3.5	3.0	2.5	4.5	4.0	4.5	3.5
27	7.0	6.5	5.5	5.0	4.5	4.0	3.0	3.0	4.5	3.5	4.5	3.5
28	6.5	6.5	6.0	5.5	4.0	3.5	3.5	3.0	4.5	4.0	4.0	3.0
29	6.5	6.5	6.0	6.0	4.5	4.0	4.0	3.5	4.5	3.5	5.0	3.5
30	7.0	6.5	6.0	5.0	4.0	3.5	4.0	3.0	---	---	4.0	3.5
31	6.5	6.0	---	---	4.5	3.5	4.0	4.0	---	---	4.5	3.5
MONTH	10.0	6.0	6.5	4.5	5.5	2.5	4.5	.5	4.5	2.0	5.0	3.0

15087610 NAKWASINA RIVER NEAR SITKA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	3.0	4.5	3.5	4.5	4.0	6.0	5.0	7.5	7.0	8.0	7.0
2	5.5	3.5	5.0	3.5	7.0	3.5	7.5	5.5	7.5	7.0	7.5	7.0
3	6.0	3.0	5.5	3.5	7.5	4.0	8.5	5.0	7.5	7.0	8.0	7.0
4	5.5	3.5	5.5	3.5	7.5	4.0	8.0	5.0	9.0	7.0	7.5	7.0
5	5.5	4.0	5.5	4.0	7.5	4.5	6.5	5.5	9.0	6.5	7.5	7.0
6	5.0	3.5	5.5	4.0	7.0	4.5	6.0	5.5	9.0	6.5	7.5	7.0
7	5.0	3.5	5.0	4.0	7.5	4.5	6.5	5.5	8.0	7.0	7.0	6.5
8	5.5	3.5	6.0	3.5	7.5	4.5	7.0	5.5	8.0	7.5	8.5	7.0
9	5.5	3.5	6.5	3.5	6.0	4.5	7.5	5.5	8.5	7.5	8.0	7.5
10	5.0	3.5	6.5	3.5	7.5	4.5	6.5	6.0	9.5	7.5	8.0	6.5
11	4.5	4.0	6.5	3.5	6.0	5.0	6.5	6.0	9.5	7.5	8.0	6.5
12	4.5	3.5	6.5	3.5	5.5	5.0	7.0	6.5	9.0	7.5	7.5	6.5
13	5.0	3.5	4.5	3.5	5.5	5.0	7.0	6.0	8.0	7.5	7.0	6.5
14	4.0	3.0	5.0	4.0	5.5	4.5	7.5	6.0	8.5	7.0	7.5	7.0
15	4.0	2.5	6.5	3.5	5.5	5.0	6.5	6.0	8.0	7.0	7.5	7.0
16	3.5	3.0	5.5	4.0	5.5	4.5	7.0	6.5	9.0	7.0	8.5	7.5
17	5.0	3.0	4.5	4.0	5.5	4.5	7.5	6.0	8.5	8.0	8.0	6.0
18	4.5	3.5	5.0	3.5	6.0	4.5	8.0	6.0	8.0	7.5	7.5	7.0
19	4.5	3.0	5.0	4.0	7.0	4.5	7.0	6.5	8.0	7.5	8.0	7.0
20	4.5	3.0	5.0	3.5	7.0	4.5	7.0	6.5	8.0	7.5	7.5	6.5
21	4.0	3.5	5.0	3.5	5.5	5.0	8.5	6.5	8.0	7.0	7.5	6.5
22	4.0	3.5	5.5	3.5	5.5	5.0	7.5	6.5	8.0	7.0	8.0	7.5
23	5.0	3.0	7.0	4.0	7.0	5.0	8.0	7.0	8.5	7.0	7.5	7.0
24	5.0	3.5	7.0	4.0	8.0	5.0	8.0	6.5	8.5	7.0	9.5	7.0
25	5.0	3.5	6.5	4.0	8.5	5.0	7.5	6.5	8.0	7.0	9.0	7.5
26	5.0	3.5	7.0	4.0	6.0	5.0	8.0	6.5	8.5	6.5	8.0	7.0
27	4.5	3.5	7.0	4.0	6.0	5.0	8.0	6.5	8.5	6.5	8.0	7.5
28	5.0	3.5	5.0	4.0	5.5	5.0	7.5	6.5	7.0	7.0	7.5	7.5
29	5.0	3.5	5.5	4.0	6.5	5.5	7.5	7.0	8.0	7.0	7.5	7.0
30	4.5	4.0	5.0	4.0	6.0	5.0	7.5	6.5	8.0	7.0	7.5	7.0
31	---	---	4.5	4.0	---	---	7.5	7.0	7.5	6.5	---	---
MONTH	6.0	2.5	7.0	3.5	8.5	3.5	8.5	5.0	9.5	6.5	9.5	6.0
YEAR	10.0	.5										

15093200 BETTY LAKE OUTLET AT PORT ARMSTRONG

LOCATION.--Lat 56°17'55", long 134°40'50", in NW¼NW¼ sec.29, T.64 S., R.69 E., Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, on right bank of outlet to Betty Lake 0.2 mi (0.3 km) upstream from inflow to Jetty Lake and 0.8 mi (1.3 km) northwest of Port Armstrong.

DRAINAGE AREA.--2.66 mi^2 (6.89 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 306 ft (93.3 m), from topographic map.

REMARKS.--Water-discharge records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 368 ft^3/s (10.4 m^3/s) Nov. 14, 1979, gage height, 10.95 ft (3.338 m); minimum daily, 8.3 ft^3/s (0.24 m^3/s) Feb. 28, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 368 ft^3/s (10.4 m^3/s) Nov. 14, gage height, 10.95 ft (3.338 m); minimum daily, 20 ft^3/s (0.57 m^3/s) Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	71	50	53	99	77	55	172	54	46	107	49
2	96	60	46	59	89	72	52	155	54	52	81	47
3	220	51	46	56	70	69	49	91	52	46	67	48
4	181	44	45	52	52	61	47	71	52	44	59	54
5	227	38	81	47	65	55	46	64	53	42	52	53
6	140	34	85	44	88	50	47	61	55	40	46	52
7	99	30	72	37	115	46	49	62	61	38	41	48
8	82	27	70	33	151	44	48	69	59	37	37	122
9	199	24	64	29	81	43	46	66	56	35	33	155
10	164	22	60	26	68	41	45	63	53	33	31	85
11	123	20	60	28	60	38	74	61	53	32	28	65
12	111	21	55	29	54	37	170	58	52	31	26	56
13	88	50	50	30	50	35	121	56	57	31	24	50
14	76	303	43	29	46	33	78	53	69	30	29	43
15	63	245	42	28	42	31	79	51	71	29	29	39
16	53	171	39	29	38	36	100	50	68	28	40	37
17	47	142	38	29	36	38	95	57	64	27	55	35
18	41	86	46	30	33	38	100	63	60	26	52	35
19	36	132	34	63	31	41	106	98	56	36	48	46
20	31	176	46	100	29	43	89	91	53	37	44	45
21	28	141	44	84	31	50	100	75	54	40	40	45
22	25	104	42	72	36	73	162	68	71	45	37	56
23	30	75	41	61	41	66	117	63	116	47	34	54
24	42	65	40	50	45	62	77	60	89	47	32	53
25	39	58	58	41	52	66	71	57	72	52	29	57
26	36	52	52	33	68	69	74	55	67	51	28	53
27	45	46	45	27	76	65	117	54	61	50	26	57
28	80	41	70	22	77	65	131	54	56	48	25	66
29	90	41	64	26	72	60	112	54	52	48	41	90
30	95	46	51	36	---	59	166	53	48	94	42	109
31	84	---	49	34	---	59	---	53	---	183	43	---
TOTAL	2772	2416	1628	1317	1795	1621	2623	2158	1838	1430	1306	1804
MEAN	89.4	80.5	52.5	42.5	61.9	52.3	87.4	69.6	61.3	46.1	42.1	60.1
MAX	227	303	85	100	151	77	170	172	116	183	107	155
MIN	25	20	34	22	29	31	45	50	48	26	24	35
CFSM	33.6	30.3	19.7	16.0	23.3	19.7	32.9	26.2	23.0	17.3	15.8	22.6
IN.	38.75	33.77	22.76	18.41	25.09	22.66	36.67	30.17	25.69	19.99	18.26	25.22
AC-FT	5500	4790	3230	2610	3560	3220	5200	4280	3650	2840	2590	3580

CAL YR 1979 TOTAL 21491.0 MEAN 58.9 MAX 303 MIN 8.3 CFSM 22.1 IN 300.44 AC-FT 42630
WTR YR 1980 TOTAL 22708.0 MEAN 62.0 MAX 303 MIN 20 CFSM 23.3 IN 317.45 AC-FT 45040

NOTE.--No gage-height record Dec. 18 to Feb. 8.

15093200 BETTY LAKE OUTLET NEAR PORT ARMSTRONG--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August to November 1978 and June 1979 to current year.

INSTRUMENTATION.--Temperature recorder since Aug. 17, 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 19.5°C Aug. 26, 27, 1979; minimum not determined.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.5°C Aug. 10, 11; minimum, 1.5°C Jan. 20.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	8.0	7.5	6.0	5.5	4.5	4.5	3.0	2.5	3.0	3.0
2	---	---	7.5	7.5	6.0	6.0	4.5	4.0	3.0	2.5	3.0	3.0
3	---	---	7.5	7.0	6.0	5.5	4.5	4.0	3.0	2.5	3.0	3.0
4	---	---	7.0	7.0	6.0	5.5	4.5	4.0	3.0	2.5	3.0	2.5
5	---	---	7.5	7.0	5.5	5.5	4.0	4.0	3.0	3.0	2.5	2.5
6	---	---	7.0	7.0	6.0	5.5	4.0	3.5	3.0	3.0	2.5	2.5
7	---	---	7.0	7.0	5.5	5.5	4.0	3.5	3.0	2.5	3.0	2.5
8	---	---	7.0	6.5	5.5	5.0	4.0	3.5	2.5	2.5	3.0	3.0
9	---	---	7.0	6.5	5.5	5.0	4.0	3.5	2.5	2.5	3.0	2.5
10	---	---	7.0	7.0	5.0	4.5	4.0	3.0	2.5	2.5	3.0	2.5
11	---	---	7.0	7.0	5.0	5.0	4.0	3.0	2.5	2.5	3.0	2.5
12	---	---	7.0	6.5	5.0	4.5	3.5	3.0	3.0	2.5	3.5	3.0
13	10.5	10.5	6.5	6.5	5.0	4.5	3.0	3.0	3.0	3.0	3.0	3.0
14	10.5	10.0	6.5	6.5	5.0	4.5	3.0	2.0	3.0	3.0	2.5	2.5
15	10.0	10.0	6.5	6.5	5.0	4.5	3.0	2.5	3.0	3.0	3.0	2.5
16	10.0	10.0	6.5	6.5	5.0	4.5	3.0	2.0	3.0	2.5	3.0	2.5
17	10.0	9.0	6.5	6.5	4.5	4.5	2.5	2.0	3.0	3.0	3.0	3.0
18	9.5	9.0	6.5	6.0	4.5	4.5	2.5	2.0	3.0	3.0	3.0	2.5
19	9.5	9.0	6.0	6.0	4.5	4.5	2.0	2.0	3.0	2.5	3.0	2.5
20	9.5	9.0	6.0	6.0	4.5	4.5	2.0	1.5	2.5	2.0	3.0	2.5
21	9.0	8.5	6.0	6.0	4.5	4.5	3.0	2.0	2.5	2.5	3.0	3.0
22	8.5	8.5	6.0	6.0	4.5	4.5	3.0	2.0	2.5	2.5	3.0	3.0
23	8.5	8.5	6.0	6.0	4.5	4.5	3.0	3.0	3.0	2.5	3.0	3.0
24	8.5	8.5	6.0	6.0	4.5	4.5	3.5	3.0	3.0	3.0	3.0	3.0
25	8.5	8.5	6.0	6.0	4.5	4.5	3.5	3.0	3.0	3.0	3.5	3.0
26	8.5	8.0	6.0	5.5	4.5	4.5	3.0	2.0	3.0	3.0	3.0	3.0
27	8.0	7.5	6.0	6.0	4.5	4.5	2.5	2.0	3.0	3.0	3.5	3.0
28	7.5	7.5	6.0	6.0	4.5	4.5	2.5	2.0	3.0	3.0	4.0	3.0
29	7.5	7.5	6.0	5.5	4.5	4.5	3.0	2.5	3.0	3.0	3.0	3.0
30	7.5	7.5	5.5	5.5	4.5	4.5	3.0	2.5	---	---	3.5	3.0
31	7.5	7.5	---	---	4.5	4.5	3.0	2.0	---	---	3.5	3.0
MONTH		7.5	8.0	5.5	6.0	4.5	4.5	1.5	3.0	2.0	4.0	2.5

15093200 BETTY LAKE OUTLET NEAR PORT ARMSTRONG--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.5	3.0	4.0	3.5	9.0	6.0	12.5	11.5	14.5	13.5	13.5	13.0
2	3.5	2.5	4.0	3.5	10.0	7.5	14.0	12.5	14.5	14.0	13.5	13.0
3	3.5	2.5	4.0	3.5	10.0	7.5	14.0	12.5	14.5	13.5	13.0	13.0
4	3.5	3.0	4.0	3.5	12.5	9.5	13.5	12.5	16.0	13.5	12.5	12.5
5	3.5	3.0	4.0	3.5	12.0	10.0	13.0	12.5	16.5	15.0	14.0	12.5
6	3.5	3.0	4.0	4.0	13.5	11.5	12.5	12.0	16.0	15.0	12.5	12.5
7	3.5	3.0	4.0	4.0	14.0	11.0	13.0	12.5	16.0	15.0	12.5	12.0
8	3.5	3.0	5.0	4.0	13.5	11.0	14.5	12.5	16.0	15.0	12.0	12.0
9	3.5	3.5	4.5	4.0	13.0	10.5	14.0	13.5	16.5	15.5	12.5	12.0
10	3.5	3.5	4.5	4.0	14.0	11.5	14.5	13.5	17.5	15.5	12.0	12.0
11	3.5	3.5	5.0	4.0	14.0	11.0	15.0	14.0	17.5	16.5	12.5	12.0
12	3.5	3.5	4.0	4.0	11.0	10.0	14.0	13.5	16.5	15.5	12.5	12.0
13	3.5	3.5	4.5	4.0	10.5	10.0	14.0	13.5	16.0	15.5	12.5	12.0
14	3.5	3.5	5.5	4.0	11.0	10.0	14.0	13.5	15.5	15.0	14.0	12.0
15	3.5	3.5	5.0	4.5	11.0	10.5	14.0	13.5	15.0	14.5	13.0	12.5
16	3.5	3.5	5.0	4.5	11.0	10.5	14.0	13.5	15.0	14.5	13.0	12.5
17	3.5	3.5	4.5	4.0	12.0	11.0	14.0	13.5	14.5	14.0	12.5	12.0
18	3.5	3.5	4.0	4.0	13.0	11.5	13.5	13.5	15.0	14.0	12.5	12.0
19	3.5	3.5	4.0	4.0	13.0	12.0	13.5	13.5	14.5	14.0	12.0	12.0
20	3.5	3.5	5.0	4.0	12.0	11.0	13.5	13.5	15.0	14.0	12.0	11.5
21	3.5	3.5	5.5	4.5	11.0	10.0	13.5	13.5	14.0	13.5	12.0	11.5
22	4.0	3.5	6.0	5.0	11.0	10.0	13.5	13.5	14.5	13.5	12.0	11.5
23	3.5	3.5	6.0	5.0	13.0	11.0	14.0	13.5	14.0	13.5	11.5	11.5
24	3.5	3.5	7.0	5.5	13.0	11.5	14.0	13.5	13.5	13.5	11.5	11.0
25	3.5	3.5	7.5	5.5	12.0	11.5	14.0	13.5	14.5	13.0	11.5	11.0
26	3.5	3.5	9.0	6.5	12.0	11.0	16.0	14.0	14.5	13.5	12.0	11.0
27	3.5	3.5	7.5	6.5	12.0	11.5	14.5	14.0	14.0	13.5	11.0	10.5
28	3.5	3.5	7.5	6.0	12.5	11.5	14.0	14.0	14.0	13.5	11.0	10.5
29	3.5	3.5	6.5	6.0	12.5	11.5	14.0	13.0	14.0	13.5	10.5	10.5
30	3.5	3.5	6.5	6.0	12.0	11.5	13.5	13.0	14.0	13.0	10.5	10.5
31	---	---	7.0	6.0	---	---	13.5	13.5	13.0	13.0	---	---
MONTH	4.0	2.5	9.0	3.5	14.0	6.0	16.0	11.5	17.5	13.0	14.0	10.5
YEAR	17.5	1.5										

15093400 SASHIN CREEK NEAR BIG PORT WALTER

LOCATION.--Lat 56°22'32", long 134°39'40", in NW¼SW¼ sec.28, T.63 S., R.69 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, on right bank 0.7 mi (1.1 km) upstream from mouth at Little Port Walter, 1 mi (1.6 km) downstream from Sashin Lake, and 2.6 mi (4.2 km) east of Big Port Walter.

DRAINAGE AREA.--3.72 mi^2 (9.63 km^2).

PERIOD OF RECORD.--July 1965 to September 1973 and October 1974 to September 1980 (discontinued).

REVISED RECORDS.--WSP 2136: Drainage area. WRD Alaska 1972: 1971 (M).

GAGE.--Water-stage recorder. Altitude of gage is 100 ft (30 m), from topographic map.

REMARKS.--Water-discharge records fair except those for periods of no gage-height record, Nov. 12 to Feb. 2 and July 11 to Sept. 30, which are poor.

AVERAGE DISCHARGE.--14 years, 81.3 ft^3/s (2.302 m^3/s), 296.80 in/yr (7,539 mm/yr), 58,900 acre-ft/yr (72.6 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,650 ft^3/s (75.1 m^3/s) Nov. 2, 1976, gage height, 5.30 ft (1.615 m), from rating curve extended above 760 ft^3/s (21.5 m^3/s) on basis of slope-area measurement of peak flow at gage height of 4.5 ft (1.37 m) from floodmarks; maximum gage height, 5.35 ft (1.631 m) Mar. 12, 1972, backwater from ice; minimum discharge, 0.75 ft^3/s (0.021 m^3/s) Jan. 30, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (19.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 3	1200	*1,510	42.8	*4.66	1.420	Apr. 12	0200	1,060	30.1	4.33	1.320
Oct. 9	0900	1,170	33.1	4.42	1.347	July 31	Unknown	(a)560	15.9	Unknown	
Nov. 14	Unknown	930	26.3	4.22	1.286	Sept. 9	Unknown	(a)440	12.5	Unknown	

(a) Daily discharge.

Minimum daily discharge, 8.0 ft^3/s (0.23 m^3/s) Jan. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	55	52	40	60	112	32	297	43	24	310	62
2	117	42	47	56	51	85	29	171	39	43	190	52
3	689	33	43	45	40	60	28	106	39	31	120	56
4	305	27	38	35	32	45	27	77	44	26	80	66
5	393	23	94	28	43	35	34	66	51	23	55	63
6	147	20	109	26	68	29	39	61	54	21	40	59
7	92	17	78	21	105	25	50	96	51	20	30	56
8	82	15	68	18	159	29	42	103	50	18	24	190
9	562	13	61	16	86	26	37	78	46	17	19	440
10	196	12	55	14	58	22	43	70	40	15	16	180
11	127	11	49	11	43	19	469	66	37	14	13	92
12	104	13	44	10	35	18	513	60	36	13	11	61
13	86	96	38	12	29	18	166	56	46	12	9.0	43
14	84	830	33	15	25	15	103	48	62	12	11	31
15	53	510	29	18	21	14	182	45	49	11	15	23
16	44	340	25	17	18	37	160	62	43	11	20	21
17	49	250	24	17	16	26	150	83	40	10	25	19
18	36	190	40	16	15	28	204	110	34	10	32	18
19	28	320	33	43	13	28	184	208	29	23	40	38
20	23	480	58	90	14	27	160	132	27	29	50	35
21	20	230	27	72	34	58	301	95	30	38	63	34
22	18	140	26	67	54	108	264	73	112	49	80	66
23	112	90	33	27	49	55	134	59	117	70	56	62
24	113	72	22	17	82	48	111	52	71	75	38	58
25	62	57	80	12	69	81	107	48	54	84	27	70
26	60	46	59	11	143	61	132	47	44	77	20	60
27	90	37	43	9.0	138	64	293	47	38	71	15	90
28	180	34	109	8.0	112	55	199	48	31	66	11	122
29	155	38	62	11	101	38	202	46	28	62	36	180
30	121	45	28	20	---	39	254	42	24	200	42	250
31	75	---	32	14	---	40	---	41	---	560	50	---
TOTAL	4331	4086	1539	816.0	1713	1345	4649	2593	1409	1735	1548.0	2597
MEAN	140	136	49.6	26.3	59.1	43.4	155	83.6	47.0	56.0	49.9	86.6
MAX	689	830	109	90	159	112	513	297	117	560	310	440
MIN	18	11	22	8.0	13	14	27	41	24	10	9.0	18
CFSM	37.6	36.6	13.3	7.07	15.9	11.7	41.7	22.5	12.6	15.1	13.4	23.3
IN.	43.30	40.85	15.39	8.16	17.13	13.45	46.48	25.92	14.09	17.35	15.48	25.96
AC-FT	8590	8100	3050	1620	3400	2670	9220	5140	2790	3440	3070	5150

CAL YR 1979 TOTAL 26628.0 MEAN 73.0 MAX 830 MIN 4.3 CFSM 19.6 IN 266.21 AC-FT 52820
WTR YR 1980 TOTAL 28361.0 MEAN 77.5 MAX 830 MIN 8.0 CFSM 20.8 IN 283.53 AC-FT 56250

15101200 KALININ BAY TRIBUTARY NEAR SITKA

LOCATION.--Lat 57°18'14", long 135°46'35", in SE¼NW¼ sec.6, T.53 S., R.61 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Kruzof Island, in Tongass National Forest , on right bank 0.25 mi (0.4 km) upstream from mouth at Kalinin Bay and 25 mi (40 km) northwest of Sitka.

DRAINAGE AREA.--2.28 mi^2 (5.91 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1976 to September 1980 (discontinued).

REVISED RECORDS.--WDR AK-79-1: 1976-78 (M).

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (7.6 m), from topographic map.

REMARKS.--Water-discharge records good except those for periods of no gage-height record, Dec. 21 to Feb. 6 and Sept. 11-30, which are estimated and poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 945 ft^3/s (26.7 m^3/s), Oct. 9, 1979, gage height, 4.50 ft (1.372 m) from rating curve extended above 70 ft^3/s (2.0 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 0.80 ft^3/s (0.023 m^3/s) Jan. 19, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 945 ft^3/s (26.7 m^3/s) Oct. 9, gage height, 4.50 ft (1.372 m); minimum daily, 0.80 ft^3/s (0.023 m^3/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	22	45	3.6	3.7	27	9.1	84	9.9	14	66	22
2	25	7.7	21	3.1	6.6	15	8.8	39	4.4	8.4	30	7.3
3	245	4.6	9.3	2.6	16	8.5	9.5	22	3.6	4.1	21	51
4	185	3.4	16	2.0	11	4.4	8.3	14	2.6	3.6	23	34
5	127	2.3	119	1.5	7.0	3.1	9.2	13	2.3	3.2	11	34
6	26	1.7	23	1.4	70	2.9	10	13	2.1	2.3	6.8	25
7	11	1.5	12	1.3	132	3.8	12	14	1.8	2.1	5.1	10
8	27	1.4	38	1.2	14	34	10	13	1.5	1.9	13	142
9	309	1.2	12	1.2	4.4	16	5.7	7.6	1.4	2.3	14	44
10	34	1.1	22	1.1	5.2	6.2	4.5	6.6	1.3	1.6	6.5	19
11	83	1.0	24	1.0	4.4	4.0	76	3.9	1.0	1.8	3.3	12
12	37	.96	14	.96	4.8	2.7	80	6.6	4.4	1.6	2.6	7.0
13	33	23	11	.90	4.5	2.1	30	5.1	57	3.6	6.7	4.4
14	38	282	4.5	.88	4.1	1.6	16	4.1	38	8.7	7.6	2.6
15	17	125	3.2	.86	3.1	2.1	31	3.9	20	4.5	4.9	3.0
16	25	50	3.3	.84	6.2	14	41	3.6	12	8.4	142	25
17	38	52	9.5	.82	4.4	15	72	7.0	8.0	9.1	67	14
18	13	19	228	.81	3.3	25	40	11	5.4	4.4	18	12
19	7.0	119	108	.80	2.2	23	53	11	3.9	6.6	22	58
20	4.5	179	70	.90	1.7	29	29	20	3.4	9.9	31	12
21	3.5	56	50	1.1	2.0	62	119	8.7	2.3	7.0	12	10
22	3.2	35	37	64	39	49	57	5.7	9.5	10	7.4	156
23	7.4	34	26	120	20	17	27	4.4	8.0	19	15	52
24	7.4	14	19	60	24	8.1	17	4.1	9.9	14	7.2	210
25	3.6	7.3	16	19	22	11	18	3.9	5.1	9.7	5.2	94
26	3.7	4.8	15	12	27	14	30	3.4	4.1	8.4	2.5	54
27	8.3	3.4	14	8.5	19	11	50	3.2	3.9	5.6	2.2	30
28	4.7	2.8	13	5.8	15	23	38	2.8	3.4	5.9	4.0	48
29	11	2.5	10	4.0	22	15	34	2.3	3.9	27	10	128
30	37	42	6.8	2.7	---	17	94	3.6	4.1	136	4.1	160
31	22	---	4.6	1.9	---	17	---	27	---	50	9.4	---
TOTAL	1464.3	1099.66	1004.2	326.77	498.6	483.5	1039.1	371.5	238.2	394.7	580.5	1480.3
MEAN	47.2	36.7	32.4	10.5	17.2	15.6	34.6	12.0	7.94	12.7	18.7	49.3
MAX	309	282	228	120	132	62	119	84	57	136	142	210
MIN	3.2	.96	3.2	.80	1.7	1.6	4.5	2.3	1.0	1.6	2.2	2.6
CFSM	20.7	16.1	14.2	4.61	7.54	6.84	15.2	5.26	3.48	5.57	8.20	21.6
IN.	23.88	17.93	16.38	5.33	8.13	7.89	16.95	6.06	3.88	6.44	9.47	24.14
AC-FT	2900	2180	1990	648	989	959	2060	737	472	783	1150	2940

CAL YR 1979 TOTAL 7188.46 MEAN 19.7 MAX 309 MIN .96 CFSM 8.64 IN 117.23 AC-FT 14260
WTR YR 1980 TOTAL 8981.33 MEAN 24.5 MAX 309 MIN .80 CFSM 10.7 IN 146.47 AC-FT 17810

15101200 KALININ BAY TRIBUTARY NEAR SITKA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to 1980 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1976 to September 1978 and June to December 1979 (discontinued).

INSTRUMENTATION.--Temperature recorder since Sept. 1, 1976.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 14.0°C July 26-28, Aug. 3, 5, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum for period October to December, 10.0°C Oct. 9 and 11; minimum not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)
FEB 06...	1500	67	--	--	1.5	6	1.8	.3	2.5	.2	.5
APR 28...	1515	34	32	7.2	4.5	7	2.2	.4	2.6	.3	1.3
JUL 24...	1300	14	39	7.8	10.0	11	3.4	.5	2.5	.2	1.2

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
FEB 06...	5.3	.1	2.3	--	--	--	--	--	--	--	--
APR 28...	3.5	.0	2.8	.02	.000	.02	.040	--	--	--	--
JUL 24...	3.2	.4	5.4	--	--	.02	.000	1.1	1.1	1.1	.010

15101200 KALINIIN BAY TRIBUTARY NEAR SITKA--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER TO DECEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.0	8.5	6.0	4.5	4.0	3.5						
2	9.0	8.0	5.0	3.5	3.5	2.5						
3	9.5	8.5	4.0	3.5	3.5	3.0						
4	9.5	8.0	4.0	3.0	4.0	3.0						
5	9.0	8.0	3.0	2.5	5.0	4.0						
6	8.0	7.0	2.5	2.0	3.5	3.0						
7	7.5	6.0	4.5	2.0	3.5	2.0						
8	9.5	7.0	5.5	4.5	3.0	2.0						
9	10.0	9.0	6.0	5.5	2.0	1.0						
10	9.0	8.5	6.5	6.0	1.5	1.0						
11	10.0	8.5	6.0	5.5	---	---						
12	9.0	8.0	6.0	5.5	---	---						
13	8.0	7.5	7.0	5.5	---	---						
14	8.0	7.0	7.5	6.5	---	---						
15	7.0	6.0	7.0	6.0	---	---						
16	7.0	6.0	6.5	5.5	---	---						
17	8.0	7.0	5.5	4.0	---	---						
18	7.0	6.0	4.0	4.0	---	---						
19	6.0	5.0	6.0	4.0	---	---						
20	5.5	4.5	5.5	5.0	---	---						
21	6.0	4.5	6.0	5.0	---	---						
22	7.0	5.5	6.0	5.0	---	---						
23	7.0	6.5	5.0	4.5	---	---						
24	8.0	6.5	4.5	3.5	---	---						
25	6.5	5.5	4.0	3.5	---	---						
26	7.0	6.0	3.0	2.5	---	---						
27	7.0	6.0	3.5	2.5	---	---						
28	7.0	6.0	5.0	3.5	---	---						
29	7.0	6.5	5.0	4.5	---	---						
30	7.5	6.0	5.0	4.0	---	---						
31	7.0	6.0	---	---	---	---						
MONTH	10.0	4.5	7.5	2.0								

15101500 GREENS CREEK NEAR JUNEAU

LOCATION.--Lat 58°05'18", long 134°44'49", in SE¼ sec.11, T.44 S., R.65 E., Hydrologic Unit 19060000, on Admiralty Island, in Tongass National Forest, on left bank 1 mi (1.6 km) upstream from mouth at Hawk Inlet and 19 mi (31 km) southwest of Juneau.

DRAINAGE AREA.--22.8 mi² (59.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map.

REMARKS.--Records good except those for Dec. 10 to Mar. 24, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s (74.8 m³/s) Oct. 30, 1978, gage height, 15.12 ft (4.609 m); minimum daily, 8.9 ft³/s (0.25 m³/s) Feb. 14, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,750 ft³/s (49.6 m³/s) Oct. 3, gage height, 14.54 ft (4.432 m); minimum daily, 14 ft³/s (0.40 m³/s) Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	88	70	38	52	85	23	104	148	108	216	89
2	175	71	63	35	62	50	24	114	136	114	185	88
3	806	65	59	32	80	39	27	80	158	101	163	114
4	330	62	59	29	68	37	32	69	201	98	138	146
5	594	58	112	27	44	33	40	77	254	96	116	118
6	218	54	91	25	58	29	41	100	256	92	108	104
7	160	52	72	24	88	28	40	111	231	84	97	93
8	144	53	62	22	62	28	39	123	207	86	98	174
9	834	53	59	21	55	26	37	126	173	95	95	185
10	314	53	57	20	41	25	38	127	146	84	88	132
11	299	53	56	19	36	26	65	124	137	79	79	110
12	344	53	54	18	34	24	77	131	149	86	75	93
13	209	70	53	19	39	22	59	145	235	98	81	84
14	174	176	52	20	41	21	50	136	261	121	81	84
15	145	227	50	21	52	19	50	136	222	101	75	79
16	129	134	48	22	81	17	74	152	207	102	129	95
17	120	136	47	23	146	16	76	161	200	96	185	95
18	106	97	55	25	135	15	87	142	150	86	127	95
19	95	90	74	26	77	15	92	134	130	100	118	136
20	88	220	90	28	69	14	64	123	121	150	161	98
21	86	418	86	29	73	17	55	112	122	160	132	95
22	86	314	80	31	67	20	62	102	204	133	110	206
23	95	141	75	36	46	22	67	98	183	162	127	200
24	89	119	70	41	42	23	55	112	145	169	108	274
25	79	99	61	47	31	24	64	121	134	164	98	263
26	75	85	60	50	37	24	80	125	128	101	88	163
27	79	79	58	48	48	25	111	150	126	90	78	134
28	77	74	59	46	55	25	93	151	118	84	76	132
29	75	71	51	45	57	25	86	132	112	85	100	158
30	76	68	45	41	---	24	85	132	103	127	83	197
31	78	---	41	46	---	23	---	171	---	249	78	---
TOTAL	6330	3333	1969	954	1776	821	1793	3821	5097	3501	3493	4034
MEAN	204	111	63.5	30.8	61.2	26.5	59.8	123	170	113	113	134
MAX	834	418	112	50	146	85	111	171	261	249	216	274
MIN	75	52	41	18	31	14	23	69	103	79	75	79
CFSM	8.95	4.87	2.79	1.35	2.68	1.16	2.62	5.40	7.46	4.96	4.96	5.88
IN.	10.33	5.44	3.21	1.56	2.90	1.34	2.93	6.23	8.32	5.71	5.70	6.58
AC-FT	12560	6610	3910	1890	3520	1630	3560	7580	10110	6940	6930	8000

CAL YR 1979 TOTAL 35637.7 MEAN 97.6 MAX 834 MIN 8.9 CFSM 4.28 IN 58.14 AC-FT 70690
WTR YR 1980 TOTAL 36922.0 MEAN 101 MAX 834 MIN 14 CFSM 4.43 IN 60.24 AC-FT 73230

NOTE.--No gage-height record Dec. 31 to Feb. 8.

15101500 GREENS CREEK NEAR JUNEAU--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1978 to current year.
WATER TEMPERATURES: December 1978 to current year.

INSTRUMENTATION.--Water quality mini-monitor since Dec. 31, 1978 in conjunction with satellite telemeter.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum observed, 277 micromhos/cm Jan. 31 and Feb. 1-2, 1979; minimum, 64 micromhos/cm Apr. 28, 1979.
WATER TEMPERATURES: Maximum, 12.5°C Aug. 18, 19, 22, and 23, 1979; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 225 micromhos/cm Nov. 6; minimum, 71 micromhos/cm Oct. 3.
WATER TEMPERATURES: Maximum, 12.0°C Aug. 12; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
NOV 23...	1200	151	122	7.3	4.0	--	2.4	--	50	10	16	2.5
JAN 22...	1330	31	161	7.0	.0	5	4.0	--	72	22	22	4.2
APR 03...	1400	27	153	8.0	2.0	20	--	13.4	69	14	21	3.9
JUL 31...	1230	162	108	7.8	10.0	15	--	10.2	48	6	15	2.6
SEP 23...	1700	192	106	7.8	7.5	22	--	11.8	47	--	15	2.3

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, VOLATILE, DISSOLVED (MG/L)
NOV 23...	1.8	.2	49	0	8.7	1.5	.1	3.7	--	59	--
JAN 22...	2.5	.2	--	--	19	1.9	.0	--	90	--	16
APR 03...	2.0	.3	67	0	20	2.2	.0	4.3	105	87	--
JUL 31...	1.2	.1	51	0	12	1.0	.2	2.3	63	60	16
SEP 23...	1.4	.2	--	--	8.2	1.6	.0	3.6	71	--	55

15101500 GREENS CREEK NEAR JUNEAU--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
NOV 23...	.08	--	--	--	--	--	--	--	--	--	0
JAN 22...	.14	.030	.54	.57	.71	.010	.010	190	150	40	2
APR 03...	.08	.060	.62	.68	.76	.020	.010	150	70	80	1
JUL 31...	.02	.000	3.0	3.0	3.0	.010	.000	190	90	100	2
SEP 23...	.00	.000	.46	.46	.46	.010	.010	210	160	50	1

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
NOV 23...	300	0	0	--	0	220	150	70	6	20	20
JAN 22...	100	0	--	0	12	290	--	--	4	10	--
APR 03...	100	1	6	--	3	190	--	--	4	10	--
JUL 31...	100	0	--	--	6	580	--	--	7	20	--
SEP 23...	0	0	--	--	14	410	--	--	6	20	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 23...	4	.0	--	1	0	50	--	--	9	3.7	--
JAN 22...	--	.3	5	1	0	0	0	.0	--	--	--
APR 03...	--	.6	5	1	0	10	0	1.0	0	.00	--
JUL 31...	--	.2	4	1	0	20	--	.4	14	6.1	28
SEP 23...	--	.4	8	1	0	60	0	1.0	4	2.1	--

15101500 GREENS CREEK NEAR JUNEAU--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	124	98	151	142	149	136	156	154	167	164	110	89
2	117	97	156	151	146	137	159	155	166	143	127	109
3	97	71	159	155	151	132	162	159	141	123	136	120
4	109	93	162	159	153	143	167	162	143	133	149	132
5	106	74	165	161	149	111	173	168	146	143	147	136
6	125	108	225	164	129	116	171	167	143	100	151	140
7	136	125	169	165	134	115	169	167	126	90	153	147
8	139	122	170	168	136	118	171	164	116	103	154	128
9	121	73	172	169	144	117	175	168	125	102	147	129
10	122	103	172	170	146	102	176	173	136	122	153	141
11	125	108	173	171	141	88	180	173	135	125	155	135
12	118	99	173	172	161	143	180	178	134	126	159	137
13	129	118	173	132	169	159	179	177	137	127	168	142
14	135	128	130	104	176	169	178	176	137	120	169	153
15	142	135	118	100	176	174	176	174	145	116	174	132
16	146	141	128	119	175	170	175	172	158	144	164	129
17	150	144	127	120	170	166	176	172	158	151	153	121
18	153	149	137	128	166	159	176	172	158	149	168	158
19	157	154	140	134	158	125	176	169	164	156	169	149
20	160	157	133	94	125	105	174	168	167	163	159	148
21	162	159	116	79	126	104	171	167	166	153	152	127
22	164	161	112	88	138	126	173	95	165	147	128	105
23	165	146	127	110	145	138	119	104	148	127	135	114
24	156	151	137	127	149	142	136	120	151	129	146	127
25	160	155	143	137	151	108	147	137	152	137	153	138
26	161	159	146	142	124	106	155	147	142	113	149	128
27	162	151	148	145	137	96	160	151	123	109	145	126
28	159	151	148	144	128	99	160	158	118	109	144	134
29	160	157	149	140	128	98	161	158	119	96	146	135
30	158	156	150	142	131	107	164	160	---	---	147	136
31	159	148	---	---	155	128	165	163	---	---	151	133
MONTH	165	71	225	79	176	88	180	95	167	90	174	89

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	152	140	116	104	113	106	145	133	110	99	142	132
2	152	136	115	102	117	110	140	133	116	105	141	132
3	149	136	124	115	112	101	144	134	120	116	140	95
4	145	138	127	122	105	98	144	138	127	119	113	95
5	141	129	129	124	110	99	145	136	133	127	117	110
6	133	126	126	118	116	107	142	136	139	133	120	113
7	130	119	121	116	116	109	141	137	143	139	125	120
8	129	115	116	112	119	111	146	138	143	139	124	101
9	131	119	118	111	125	112	145	139	146	142	111	103
10	130	120	118	110	129	121	142	134	151	145	115	111
11	128	110	119	111	129	122	140	134	154	150	121	115
12	114	108	118	108	127	116	138	132	158	152	126	121
13	115	106	114	106	115	103	133	126	155	143	129	125
14	117	100	117	111	112	107	126	117	152	143	131	128
15	105	96	118	111	114	110	129	124	162	152	133	131
16	105	88	112	107	119	111	131	124	165	102	131	121
17	109	95	110	106	121	113	134	127	122	102	124	107
18	114	94	116	108	129	119	138	129	133	121	121	109
19	113	94	115	112	130	126	138	125	131	125	122	94
20	113	106	121	114	139	126	125	116	124	113	101	98
21	113	104	123	117	135	130	119	113	127	121	---	---
22	113	105	128	122	129	116	133	119	133	126	---	---
23	106	100	130	122	121	116	125	120	131	121	103	101
24	116	98	124	115	129	120	129	121	131	125	103	85
25	120	114	119	112	133	124	145	128	138	130	118	92
26	119	112	122	108	131	127	148	141	142	137	130	118
27	112	103	112	104	132	127	147	142	147	142	135	130
28	113	106	112	103	142	132	147	143	148	139	135	115
29	117	110	115	110	145	136	150	145	139	132	123	114
30	118	114	116	108	147	140	153	126	142	138	116	106
31	---	---	107	102	---	---	126	124	143	138	---	---
MONTH	152	88	130	.102	147	98	153	113	165	99	142	85
YEAR	225	71										

15101500 GREENS CREEK NEAR JUNEAU--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.5	5.0	3.5	3.5	3.0	.0	.0	.5	.0	1.0	.0
2	7.5	7.0	3.5	2.5	3.0	1.5	.0	.0	.5	.0	1.0	1.0
3	8.0	7.0	2.5	2.0	2.0	2.0	.0	.0	.0	.0	1.0	.0
4	7.5	7.0	3.0	2.5	3.0	2.0	.0	.0	.0	.0	.0	.0
5	7.5	7.0	2.5	1.5	3.0	2.5	.0	.0	.0	.0	.5	.0
6	7.0	6.5	1.5	1.5	2.5	2.0	.0	.0	.5	.0	.5	.0
7	6.5	5.5	2.0	1.5	2.5	1.0	.0	.0	.5	.0	.5	.5
8	6.5	6.0	3.0	2.0	2.0	1.0	.5	.0	.5	.0	1.0	.5
9	8.5	7.0	3.5	3.0	1.5	.0	.0	.0	.5	.0	1.5	1.0
10	8.0	8.0	3.5	3.0	1.5	.5	.0	.0	1.0	.5	1.5	1.0
11	8.5	7.5	4.0	3.0	1.5	.0	.0	.0	1.0	.5	1.0	.0
12	8.5	7.0	4.0	3.5	.5	.0	.0	.0	.5	.5	.5	.0
13	7.0	6.5	4.0	3.5	.0	.0	.0	.0	.5	.5	.5	.0
14	6.5	6.0	5.0	4.0	.0	.0	.0	.0	.5	.0	.5	.0
15	6.5	5.5	5.0	4.5	.0	.0	.0	.0	.5	.0	.5	.0
16	6.0	5.0	4.5	4.5	.0	.0	.0	.0	.0	.0	.5	.0
17	6.0	5.5	4.5	3.0	.0	.0	.0	.0	.0	.0	.5	.0
18	5.5	4.5	3.0	2.5	.0	.0	.0	.0	.0	.0	1.0	.5
19	4.5	4.0	4.0	2.5	.0	.0	.0	.0	.0	.0	1.5	1.0
20	4.5	3.5	4.0	3.5	.0	.0	.0	.0	.0	.0	1.5	1.0
21	4.5	3.5	4.5	4.0	.0	.0	.5	.0	.0	.0	2.0	1.0
22	5.5	4.5	4.5	4.0	.0	.0	.5	.0	.0	.0	1.5	1.0
23	6.0	5.0	4.0	3.5	.0	.0	.0	.0	.5	.0	1.5	1.0
24	6.5	5.5	3.5	2.5	.5	.0	.0	.0	1.0	.5	1.5	1.0
25	5.5	4.5	2.5	2.5	1.0	.0	.0	.0	1.0	1.0	2.0	1.0
26	6.0	5.0	2.5	1.5	1.0	.5	.0	.0	1.0	1.0	2.0	1.0
27	6.0	5.5	2.0	1.0	1.0	1.0	.0	.0	1.0	1.0	1.5	1.0
28	5.5	5.5	2.5	2.0	1.0	.5	.0	.0	1.5	1.0	2.0	1.0
29	5.5	5.5	3.0	2.5	1.5	1.0	.0	.0	1.5	.5	2.0	1.0
30	6.0	5.5	3.5	3.0	1.0	.0	.0	.0	---	---	1.5	1.0
31	5.5	5.0	---	---	.5	.0	.0	.0	---	---	2.0	1.0
MONTH	8.5	3.5	5.0	1.0	3.5	.0	.5	.0	1.5	.0	2.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.5	1.0	4.0	3.0	6.5	4.5	8.5	7.0	10.0	9.0	9.5	8.5
2	2.5	1.0	4.0	2.5	7.5	4.0	8.0	7.0	10.0	9.0	9.5	8.5
3	2.0	1.0	4.5	2.5	8.5	4.5	8.5	7.0	9.5	9.0	9.0	8.5
4	2.5	1.0	5.0	2.5	8.5	5.0	9.5	7.5	10.5	8.5	8.5	7.5
5	2.5	1.5	5.5	3.5	8.5	5.5	9.0	8.0	10.5	9.0	8.0	7.0
6	2.5	1.5	5.0	3.5	9.0	5.5	9.0	8.5	11.0	8.5	8.0	7.0
7	2.5	1.5	5.0	3.0	9.0	5.5	8.5	8.0	10.5	9.5	8.0	7.5
8	2.5	1.5	5.0	3.5	9.0	5.5	9.0	8.0	10.5	10.0	8.5	7.5
9	2.5	1.0	5.5	3.0	7.5	5.5	9.0	8.5	10.5	10.0	8.5	8.0
10	2.5	1.5	5.5	3.0	9.0	5.5	9.0	8.5	11.5	10.0	8.0	6.5
11	2.5	1.5	5.5	3.0	7.0	5.5	9.0	8.5	11.5	9.5	7.5	6.0
12	3.0	1.5	6.5	3.5	7.0	6.0	9.0	8.5	12.0	10.5	7.0	5.5
13	3.0	2.0	5.5	3.5	6.5	5.5	9.5	8.5	11.5	10.0	7.5	6.0
14	2.5	1.5	5.0	4.0	7.0	6.0	10.0	8.5	10.5	9.5	8.5	7.5
15	2.5	1.5	6.0	3.5	7.5	6.0	9.0	8.5	10.0	9.0	8.5	8.0
16	2.0	1.5	6.0	4.0	7.0	6.0	8.5	8.5	10.0	9.0	9.5	8.5
17	2.5	1.5	5.5	4.0	7.5	5.5	9.5	8.5	10.5	9.0	9.0	7.5
18	3.0	1.0	5.5	3.5	8.0	6.0	9.5	8.0	10.0	9.5	8.0	6.0
19	3.0	1.0	5.5	4.0	8.5	5.5	10.0	9.0	10.0	9.0	8.0	6.5
20	3.0	2.0	5.0	3.5	8.5	5.5	10.0	9.0	10.0	9.0	7.5	7.0
21	3.0	2.0	5.5	3.0	7.0	6.0	11.0	9.5	10.0	8.5	---	---
22	2.5	2.5	6.0	3.5	7.0	6.0	10.5	9.5	10.0	8.5	---	---
23	3.0	1.5	7.0	4.0	8.5	6.0	10.5	9.5	9.5	8.5	7.5	7.5
24	3.5	2.0	7.0	3.5	10.0	6.0	10.5	9.0	9.5	8.0	8.0	7.0
25	4.0	3.0	6.0	4.0	10.0	6.5	10.0	9.5	10.0	8.5	8.5	7.5
26	4.0	2.5	7.5	4.5	8.5	7.0	10.0	9.5	9.5	8.0	7.5	6.5
27	3.5	2.5	7.5	4.0	8.5	7.0	10.0	9.5	9.0	8.0	8.5	7.5
28	4.0	2.5	6.0	4.5	7.5	7.0	10.0	9.5	9.0	8.5	7.5	7.5
29	3.5	2.5	6.0	4.5	7.5	7.0	9.5	9.0	9.0	8.0	8.0	7.5
30	4.5	3.0	5.5	4.0	7.5	7.0	10.0	9.0	9.5	8.5	8.0	7.0
31	---	---	5.5	4.0	---	---	9.5	9.5	9.0	8.0	---	---
MONTH	4.5	1.0	7.5	2.5	10.0	4.0	11.0	7.0	12.0	8.0	9.5	5.5
YEAR	12.0	.0										

15106100 BLACK RIVER NEAR PELICAN

LOCATION.--Lat 57°42'19", long 136°05'34", in NW¼SW¼ sec.18, T.48 S., R.58 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 1.2 mi (2.0 km) upstream from mouth at Black Bay and 23 mi (37 km) southeast of Pelican.

DRAINAGE AREA.--24.7 mi² (64.0 km²).

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (9.1 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,620 ft³/s (159 m³/s) Oct. 9, 1979, gage height, 13.00 ft (3.962 m), from rating curve extended above 470 ft³/s (13.3 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 9.0 ft³/s (0.25 m³/s) Dec. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,620 ft³/s (159 m³/s) Oct. 9, gage height, 13.00 ft (3.962 m), from rating curve extended as explained above; minimum daily, 10 ft³/s (0.28 m³/s) Dec. 13.

REVISIONS.--The maximum discharges for water years 1978 and 1979 have been revised to 4,280 ft³/s (121 m³/s) Oct. 14, 1977, gage height, 11.70 ft (3.566 m) and 3,100 ft³/s (87.8 m³/s) Oct. 18, 1978, gage height, 10.33 ft (3.149 m), respectively. Revised daily discharges, in cubic feet per second, for high-water periods in October 1977 and in October and November 1978 are given below. These figures supersede those published in the report for 1979.

Oct. 14, 1977...	1,900	Oct. 17, 1977...	1,700	Oct. 18, 1978...	1,960	Oct. 29, 1978...	1,200
15.........	2,060	Oct. 6, 1978...	1,300	24.........	1,330	30.........	2,070
16.........	2,450	17.........	1,350	25.........	1,780	Nov. 27.........	1,340

Month	Cfs-days	Mean	Maximum	Minimum	Per square mile	Runoff in Inches	Runoff in Acre-feet
October 1977...........................	17,441	563	2,450	82	22.8	26.27	34,590
WTR YR 1978...........................	78,621.0	215	2,450	9.0	8.70	118.40	155,900
October 1978...........................	26,445	853	2,070	247	34.5	39.83	52,450
November 1978...........................	9,939	331	1,340	48	13.4	14.97	19,710
CAL YR 1978...........................	97,586.0	267	2,070	27	10.8	146.97	193,600
WTR YR 1979...........................	94,565.4	259	2,070	9.4	10.5	142.42	187,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	164	333	127	292	311	261	735	324	224	630	229
2	462	115	225	126	461	251	256	552	279	195	262	196
3	1940	85	181	100	357	216	265	442	273	166	360	383
4	818	60	319	46	262	177	279	374	275	152	300	245
5	1090	47	627	42	259	192	315	435	285	145	181	244
6	396	39	287	108	383	184	309	452	287	140	149	191
7	297	34	221	101	526	188	317	417	261	137	135	149
8	443	30	195	45	214	314	317	441	230	148	204	737
9	2800	26	168	42	230	282	307	430	212	140	232	349
10	567	24	155	26	217	226	299	401	195	77	168	196
11	772	22	92	19	200	199	785	363	197	75	138	152
12	469	25	13	18	183	194	705	366	336	148	123	130
13	463	444	10	28	192	187	425	348	459	232	163	115
14	419	1160	13	59	157	173	332	315	413	203	151	151
15	280	717	29	103	185	167	330	332	311	164	131	133
16	366	442	90	89	116	180	364	345	254	178	739	268
17	616	291	150	91	142	180	390	396	236	183	468	165
18	260	194	440	143	169	209	439	373	222	148	233	173
19	197	740	438	154	135	212	448	370	207	156	308	229
20	164	674	394	210	144	215	377	350	186	177	226	140
21	141	481	208	210	161	316	539	317	200	165	191	193
22	124	321	194	438	213	317	452	285	453	162	164	523
23	130	267	240	295	231	269	367	281	291	189	147	300
24	135	196	178	187	272	232	351	297	220	155	130	717
25	116	171	208	99	271	220	410	295	192	141	120	391
26	25	155	192	84	304	241	477	291	178	139	112	188
27	27	145	206	37	315	251	515	295	171	133	106	211
28	77	142	207	93	305	322	488	287	172	223	107	303
29	142	152	185	123	316	281	439	277	175	280	174	503
30	234	388	159	112	---	250	774	329	165	726	125	339
31	198	---	98	156	---	283	---	425	---	442	165	---
TOTAL	14574	7751	6455	3511	7212	7239	12332	11616	7659	5943	6842	8243
MEAN	470	258	208	113	249	234	411	375	255	192	221	275
MAX	2800	1160	627	438	526	322	785	735	459	726	739	737
MIN	25	22	10	18	116	167	256	277	165	75	106	115
CFSM	19.0	10.4	8.42	4.58	10.1	9.47	16.6	15.2	10.3	7.77	8.95	11.1
IN.	21.95	11.67	9.72	5.29	10.86	10.90	18.57	17.49	11.53	8.95	10.30	12.41
AC-FT	28910	15370	12800	6960	14300	14360	24460	23040	15190	11790	13570	16350

CAL YR 1979 TOTAL 79959.4 MEAN 219 MAX 2800 MIN 9.4 CFSM 8.87 IN 120.42 AC-FT 158600
WTR YR 1980 TOTAL 99377.0 MEAN 272 MAX 2800 MIN 10 CFSM 11.0 IN 149.66 AC-FT 197100

15106940 HOOK CREEK ABOVE TRIBUTARY NEAR TENAKEE

LOCATION.--Lat 57°40'39", long 135°07'42", in NW¼SE¼ sec.25, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 0.5 mi (0.8 km) upstream from unnamed tributary, 2.5 mi (4.0 km) upstream from mouth, and 9 mi (14 km) south of Tenakee.

DRAINAGE AREA.--4.48 mi² (11.60 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1967 to September 1980 (discontinued).

REVISED RECORDS.--WRD Alaska 1972: 1971 (M).

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (90 m), from topographic map. Prior to May 15, 1969, water-stage recorder and wooden control at site 130 ft (39 m) downstream at datum 1.0 ft (0.30 m) lower.

REMARKS.--Water-discharge records fair except those for period of no gage-height record, May 26 to July 22, which are poor.

AVERAGE DISCHARGE.--13 years, 28.2 ft³/s (0.799 m³/s), 85.48 in/yr (2,171 mm/yr), 20,430 acre-ft/yr (25.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,290 ft³/s (36.5 m³/s) Sept. 15, 1976, gage height, 3.79 ft (1.155 m), from rating curve extended above 110 ft³/s (3.1 m³/s) on basis of slope-area measurement at gage height 3.7 ft (1.13 m) from floodmarks; maximum gage height, 5.71 ft (1.740 m) Mar. 13, 1972, backwater from ice; minimum daily discharge, 1.5 ft³/s (0.042 m³/s) Jan. 29 to Feb. 5, Dec. 23 and 24, 1971, Jan. 21-29, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 260 ft³/s (7.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1830	345	9.77	2.28	0.695	Nov. 20	0145	840	23.8	3.21	0.978
Oct. 5	0200	*1,000	28.3	*3.43	1.045	Nov. 30	1530	269	7.62	2.07	0.631
Oct. 9	0630	834	23.6	3.20	0.975						

Minimum daily discharge, 3.0 ft³/s (0.085 m³/s) July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	13	62	16	35	32	9.8	105	28	6.8	21	18
2	62	12	24	17	90	20	11	75	26	15	16	13
3	54	11	16	15	150	13	14	48	28	12	14	23
4	54	10	15	15	70	18	13	40	31	7.2	16	26
5	258	8.8	14	14	55	13	17	43	34	5.8	12	30
6	46	8.0	14	13	47	11	18	54	29	5.0	9.9	20
7	29	7.6	13	12	151	11	17	61	26	4.6	8.8	16
8	43	7.3	13	11	33	11	17	59	23	4.8	8.5	74
9	311	7.0	13	12	21	11	17	51	21	4.8	8.2	41
10	54	6.3	14	13	16	8.8	18	51	19	3.3	7.8	21
11	47	7.9	15	12	14	8.7	52	46	19	3.5	6.9	16
12	51	5.5	17	11	12	7.4	50	51	27	3.0	6.7	15
13	33	48	23	10	11	9.3	29	48	34	7.3	7.0	12
14	31	133	32	9.8	10	17	21	46	30	9.0	7.3	12
15	24	118	30	9.5	9.3	18	23	49	21	5.5	7.0	11
16	19	67	27	9.2	8.5	12	33	53	18	4.2	27	11
17	18	46	24	9.0	7.8	9.7	36	50	16	4.1	24	10
18	18	27	45	8.9	7.2	8.6	81	48	15	3.5	13	21
19	16	182	43	12	6.7	8.2	48	78	13	7.0	11	52
20	13	211	37	15	6.6	9.7	47	60	12	12	10	16
21	12	257	42	8.9	8.0	21	51	41	11	14	9.6	25
22	11	83	24	10	10	24	61	38	18	15	9.1	48
23	16	43	17	12	12	13	46	35	19	16	8.4	32
24	17	87	14	18	13	9.0	43	35	13	14	7.9	57
25	15	20	20	20	14	9.3	78	36	11	11	8.3	50
26	13	16	16	21	26	12	99	37	9.6	9.8	7.7	25
27	13	13	15	21	26	16	101	36	9.0	8.9	7.3	24
28	13	13	14	20	26	25	67	31	8.4	8.0	8.0	95
29	13	14	13	20	27	18	69	28	7.5	8.9	30	103
30	13	88	14	19	---	10	94	29	5.5	22	12	86
31	13	---	15	15	---	10	---	31	---	29	12	---
TOTAL	1474	1510.4	695	429.3	923.1	424.7	1280.8	1493	582.0	285.0	362.4	1003
MEAN	47.5	50.3	22.4	13.8	31.8	13.7	42.7	48.2	19.4	9.19	11.7	33.4
MAX	311	257	62	21	151	32	101	105	34	29	30	103
MIN	11	5.5	13	8.9	6.6	7.4	9.8	28	5.5	3.0	6.7	10
CFSM	10.6	11.2	5.00	3.08	7.10	3.06	9.53	10.8	4.33	2.05	2.61	7.46
IN.	12.24	12.54	5.77	3.56	7.66	3.53	10.63	12.39	4.83	2.37	3.01	8.33
AC-FT	2920	3000	1380	852	1830	842	2540	2960	1150	565	719	1990

CAL YR 1979 TOTAL 11028.6 MEAN 30.2 MAX 311 MIN 2.4 CFSM 6.74 IN 91.55 AC-FT 21880
WTR YR 1980 TOTAL 10462.7 MEAN 28.6 MAX 311 MIN 3.0 CFSM 6.38 IN 86.86 AC-FT 20750

15106940 HOOK CREEK ABOVE TRIBUTARY NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to 1980 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1967 to April 1980 (discontinued).

INSTRUMENTATION.--Temperature recorder since Aug. 1, 1967.

REMARKS.--Temperature records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 13.5°C Aug. 22, 23, 1979; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum for period October to April, 7.0°C Oct. 11, 12; minimum, 0.0°C on many days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO APRIL 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.5	6.5	5.5	4.5	3.0	3.0	.0	.0	.0	.0	1.0	1.0
2	6.5	6.5	4.5	4.0	3.0	3.0	.0	.0	.0	.0	1.0	1.0
3	6.5	6.5	4.0	3.5	3.0	3.0	.0	.0	.0	.0	1.0	.0
4	6.5	6.5	3.5	3.5	3.0	3.0	.0	.0	.0	.0	.0	.0
5	6.5	6.0	3.5	3.0	3.0	3.0	.0	.0	.5	.0	.5	.0
6	6.0	6.0	3.0	1.5	3.0	3.0	.0	.0	.5	.5	1.0	.5
7	6.0	5.0	1.5	1.5	3.0	1.5	.0	.0	.0	.0	1.0	1.0
8	6.0	5.0	1.5	1.5	1.5	1.0	.5	.0	.5	.5	1.0	1.0
9	6.5	6.0	3.5	1.5	1.0	1.0	.5	.5	.5	.0	1.0	1.0
10	6.5	6.5	3.5	3.5	1.0	.5	.5	.5	.5	.5	1.0	.5
11	7.0	6.5	3.5	3.5	.5	.5	.5	.5	.5	.5	.5	.0
12	7.0	6.5	3.5	3.5	1.0	1.0	.5	.5	.5	.5	.0	.0
13	6.5	6.5	3.5	3.5	1.0	1.0	.5	.5	.5	.5	.0	.0
14	6.5	6.5	5.0	3.5	1.0	1.0	.5	.5	.5	.0	.0	.0
15	6.5	6.0	5.0	5.0	1.0	1.0	.5	.0	.0	.0	.0	.0
16	6.0	5.5	4.5	4.5	1.0	1.0	.0	.0	.0	.0	.0	.0
17	6.0	5.5	4.5	3.5	1.0	.5	.0	.0	.0	.0	.0	.0
18	6.0	5.5	3.5	3.0	.5	.5	.0	.0	.0	.0	.0	.0
19	5.5	4.5	3.5	3.0	.5	.5	.0	.0	.0	.0	.0	.0
20	4.5	4.5	3.0	3.0	1.5	1.0	.0	.0	.0	.0	.5	.0
21	5.0	4.5	4.5	4.0	1.5	1.5	.0	.0	.0	.0	.5	.0
22	5.5	5.0	4.5	4.5	1.5	1.0	.0	.0	.0	.0	.5	.5
23	6.0	5.5	4.5	4.0	1.0	.5	.0	.0	.0	.0	1.0	.5
24	6.5	6.0	4.0	3.5	.5	.5	.0	.0	.0	.0	1.0	.5
25	6.0	6.0	3.5	3.0	.5	.5	.0	.0	.0	.5	1.0	1.0
26	6.0	5.0	3.0	2.0	.5	.0	.0	.0	.5	.5	1.0	1.0
27	6.0	5.5	2.0	2.0	.5	.5	.0	.0	.5	.5	1.0	1.0
28	6.0	6.0	3.0	2.0	.5	.0	.0	.0	1.0	.5	1.0	.5
29	6.0	6.0	3.0	2.0	.5	.0	.0	.0	1.0	1.0	1.0	.5
30	6.0	6.0	3.0	2.0	.5	.5	.0	.0	---	---	1.0	1.0
31	5.5	6.0	---	---	.5	.0	.0	.0	---	---	1.5	1.0
MONTH	7.0	4.5	5.5	1.5	3.0	.0	.5	.0	1.0	.0	1.5	.0

APRIL

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
1	1.5	1.0	5	1.5	1.0	9	1.5	1.0	12	1.5	1.0
2	1.5	1.0	6	1.5	1.0	10	2.0	1.0	13	2.0	1.5
3	1.5	1.0	7	1.5	1.0	11	1.0	1.0	14	1.5	1.5
4	1.5	1.0	8	1.5	1.0						

15106960 HOOK CREEK NEAR TENAKEE

LOCATION.--Lat 57°40'22", long 135°10'40", in SE¼SE¼ sec.27, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 1 mi (1.6 km) upstream from confluence with Kadashan River, and 9 mi (14 km) south of Tenakee.

DRAINAGE AREA.--8.00 mi² (20.72 km²).

PERIOD OF RECORD.--December 1966 to September 1980 (discontinued). Published as "above Kadashan River" prior to September 1969.

REVISED RECORDS.--WRD Alaska 1972: 1971 (M).

GAGE.--Water-stage recorder and timber-concrete control. Altitude of gage is 180 ft (55 m), from topographic map.

REMARKS.--Water-discharge records fair except those for Dec. 3 to Feb. 19, which are poor.

AVERAGE DISCHARGE.--13 years, 44.1 ft³/s (1.249 m³/s), 74.86 in/yr (1,901 mm/yr), 31,950 acre-ft/yr (39.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,520 ft³/s (43.0 m³/s) Oct. 5, 1979, gage height, 5.04 ft (1.536 m), from rating curve extended above 240 ft³/s (6.8 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 5.29 ft (1.612 m) Mar. 13, 1972, backwater from ice; minimum daily discharge, 2.5 ft³/s (0.071 m³/s) Jan. 20-29, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	1815	423	12.0	3.09	0.942	Nov. 20	0245	881	25.0	4.08	1.244
Oct. 5	0215	*1,520	43.0	*5.04	1.536	Sept. 29	0200	337	9.54	2.84	0.866
Oct. 9	0815	1,050	29.8	4.37	1.332						

Minimum daily discharge, 3.4 ft³/s (0.096 m³/s) July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	34	117	15	36	51	21	125	32	19	38	29
2	135	26	54	15	36	32	24	86	30	20	31	20
3	353	22	40	15	36	24	28	55	35	13	28	32
4	153	19	38	15	35	33	29	44	40	9.1	32	39
5	298	15	36	14	35	17	37	50	45	7.1	23	43
6	74	13	35	14	57	15	35	65	42	5.8	19	32
7	53	11	34	13	70	14	33	68	37	5.7	16	25
8	65	10	33	13	54	16	33	72	32	6.0	15	96
9	405	8.9	33	13	33	18	31	60	28	6.7	13	68
10	95	8.7	32	12	26	15	33	59	24	4.6	11	38
11	92	7.8	32	12	22	12	90	54	23	3.7	9.3	29
12	66	7.1	31	12	19	11	86	56	24	3.4	8.5	25
13	61	52	32	12	18	10	49	55	44	9.5	8.5	21
14	58	186	36	11	17	11	39	47	42	12	8.9	20
15	44	183	58	11	15	13	46	50	29	7.1	8.5	19
16	42	114	90	10	13	9.5	54	54	25	5.5	37	18
17	64	89	102	5.9	12	10	56	55	22	5.4	39	16
18	42	59	89	5.1	11	13	114	52	19	4.2	21	28
19	34	224	79	5.2	11	17	81	84	17	8.3	19	76
20	29	326	63	11	10	21	61	77	14	14	16	29
21	25	352	62	12	9.8	40	66	50	13	17	14	38
22	22	144	34	13	16	44	88	45	23	19	11	72
23	60	83	26	17	19	27	69	38	25	32	11	53
24	37	58	22	26	20	20	56	41	17	25	8.9	73
25	29	46	24	28	24	19	100	44	14	19	10	73
26	25	37	23	30	38	26	122	45	12	15	8.5	42
27	40	33	21	30	41	32	146	46	12	13	7.4	39
28	49	32	19	29	42	51	88	41	10	12	9.3	112
29	39	33	17	30	42	29	83	36	8.8	15	44	164
30	35	111	16	32	---	23	119	36	7.0	34	19	118
31	33	---	15	34	---	22	---	41	---	47	17	---
TOTAL	2755	2344.5	1343	515.2	817.8	695.5	1917	1731	745.8	418.1	561.8	1487
MEAN	88.9	78.2	43.3	16.6	28.2	22.4	63.9	55.8	24.9	13.5	18.1	49.6
MAX	405	352	117	34	70	51	146	125	45	47	44	164
MIN	22	7.1	15	5.1	9.8	9.5	21	36	7.0	3.4	7.4	16
CFSM	11.1	9.78	5.41	2.08	3.53	2.80	7.99	6.98	3.11	1.69	2.26	6.20
IN.	12.81	10.90	6.24	2.40	3.80	3.23	8.91	8.05	3.47	1.94	2.61	6.91
AC-FT	5460	4650	2660	1020	1620	1380	3800	3430	1480	829	1110	2950

CAL YR 1979 TOTAL 14933.6 MEAN 40.9 MAX 405 MIN 2.6 CFSM 5.11 IN 69.43 AC-FT 29620
WTR YR 1980 TOTAL 15331.7 MEAN 41.9 MAX 405 MIN 3.4 CFSM 5.24 IN 71.28 AC-FT 30410

15106980 TONALITE CREEK NEAR TENAKEE

LOCATION.--Lat 57°40'42", long 135°13'17", Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 2 mi (3.2 km) upstream from mouth and 9 mi (14 km) south of Tenakee.

DRAINAGE AREA.--14.5 mi² (37.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map. Prior to Mar. 23, 1970, at site 40 ft (12 m) upstream on left bank at datum 0.30 ft (0.091 m) higher.

REMARKS.--Water-discharge records good except those for periods of no gage-height record, which are poor. Satellite telemeter at station.

AVERAGE DISCHARGE.--12 years, 95.9 ft³/s (2.716 m³/s), 89.82 in/yr (2,281 mm/yr), 69,480 acre-ft/yr (85.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,610 ft³/s (102 m³/s) Oct. 9, 1979, gage height, 9.72 ft (2.962 m) from floodmarks, from rating curve extended above 390 ft³/s (11 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 6.0 ft³/s (0.17 m³/s) Jan. 15-19, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 3	Unknown	e2,150	60.9	Unknown		Oct. 9	Unknown	*3,610	102	*a9.72	2.962
Oct. 5	Unknown	e1,900	53.8	Unknown							

a From floodmarks.
e Estimated.

Minimum daily discharge, 22 ft³/s (0.62 m³/s) Mar. 13, 19, and 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	90	52	38	49	56	64	289	115	42	112	47
2	230	64	45	37	56	44	65	190	89	51	88	45
3	860	55	44	36	68	38	73	133	97	39	81	72
4	260	49	42	35	62	32	72	101	107	33	88	125
5	760	45	40	34	70	28	94	113	119	30	57	97
6	125	41	38	33	80	25	93	154	105	29	46	80
7	700	39	37	32	88	23	95	162	95	28	39	56
8	800	38	36	32	64	24	92	160	83	28	38	140
9	1440	36	35	28	50	26	83	134	72	30	36	130
10	170	36	35	26	41	25	82	140	59	28	32	96
11	197	35	34	25	37	24	177	129	56	25	29	72
12	207	33	33	25	34	23	213	129	58	25	24	52
13	137	83	33	24	31	22	126	128	124	47	31	37
14	139	307	32	26	29	23	95	110	126	60	35	34
15	92	354	32	29	28	24	104	110	82	43	32	31
16	83	254	31	28	27	24	136	123	69	42	120	43
17	225	235	30	27	26	23	133	137	65	46	185	42
18	92	152	60	28	25	23	236	118	54	36	73	41
19	70	337	120	29	26	22	176	160	46	43	73	74
20	62	350	93	31	27	22	134	132	41	54	64	55
21	55	250	78	33	27	32	171	109	41	67	54	40
22	52	180	67	35	28	55	233	96	59	71	45	70
23	123	145	60	38	28	50	151	90	69	78	44	125
24	73	112	54	38	28	47	138	96	53	53	38	220
25	59	100	56	37	29	53	251	101	44	44	38	200
26	52	70	54	36	31	60	241	106	38	39	35	147
27	67	63	50	35	35	74	336	110	40	34	32	100
28	76	54	46	34	40	66	194	110	36	36	32	94
29	73	50	44	35	44	67	191	93	34	49	83	130
30	81	51	42	37	---	64	283	91	32	69	46	175
31	84	---	41	40	---	67	---	123	---	103	33	---
TOTAL	7894	3708	1494	1001	1208	1186	4532	3977	2108	1402	1763	2670
MEAN	255	124	48.2	32.3	41.7	38.3	151	128	70.3	45.2	56.9	89.0
MAX	1440	354	120	40	88	74	336	289	126	103	185	220
MIN	52	33	30	24	25	22	64	90	32	25	24	31
CFSM	17.6	8.55	3.32	2.23	2.88	2.64	10.4	8.83	4.85	3.12	3.92	6.14
IN.	20.25	9.51	3.83	2.57	3.10	3.04	11.63	10.20	5.41	3.60	4.52	6.85
AC-FT	15660	7350	2960	1990	2400	2350	8990	7890	4180	2780	3500	5300

CAL YR 1979 TOTAL 32388.3 MEAN 88.7 MAX 1440 MIN 6.8 CFSM 6.12 IN 83.09 AC-FT 64240
WTR YR 1980 TOTAL 32943.0 MEAN 90.0 MAX 1440 MIN 22 CFSM 6.21 IN 84.51 AC-FT 65340

NOTE.--No gage-height record Oct. 1-9, Nov. 20 to Jan. 8, and Aug. 31 to Sept. 30.

15106980 TONALITE CREEK NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1968 to current year.

INSTRUMENTATION.--Temperature recorder since June 27, 1968.

REMARKS.--Records good except those for Dec. 16 to Feb. 5, which are missing.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 14.0°C Aug. 12, 1968; minimum, 0.0°C on many days during the winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 12.5°C Aug. 12 and 13; minimum, 0.0°C on many days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.5	8.0	5.5	4.0	3.5	3.0			---	---	1.5	1.0
2	8.5	7.5	4.5	4.0	3.5	3.0			---	---	1.5	1.5
3	8.0	8.0	4.0	3.5	3.0	3.0			---	---	1.5	1.0
4	8.0	8.0	3.5	2.0	3.0	3.0			---	---	1.0	.5
5	8.0	7.5	3.0	2.0	3.5	3.0			---	---	1.5	1.0
6	7.5	5.0	2.0	1.5	3.0	3.0			.5	.0	1.5	1.0
7	7.0	6.0	2.0	1.5	3.0	1.5			.5	.0	2.0	1.5
8	7.0	6.0	2.5	2.0	2.0	1.5			.5	.5	2.0	1.5
9	8.5	7.0	3.0	2.0	2.0	1.0			.5	.5	1.5	1.5
10	8.5	8.0	3.5	3.0	1.5	.5			1.0	.5	1.5	1.5
11	8.5	8.0	4.0	2.0	1.0	.5			1.0	.5	1.5	.5
12	8.5	7.5	4.0	3.5	.5	.5			.5	.5	1.0	.5
13	7.5	7.0	4.0	3.5	.5	.5			.5	.5	1.0	.5
14	7.0	6.0	5.5	4.0	.5	.5			.5	.0	.5	.5
15	7.0	6.0	5.5	5.0	.5	.5			.0	.0	.5	.0
16	6.0	5.5	5.0	4.0	---	---			.0	.0	1.0	.0
17	6.5	6.0	5.0	3.5	---	---			.0	.0	1.0	1.0
18	6.5	5.0	3.5	3.0	---	---			.0	.0	1.0	.5
19	5.5	4.5	4.0	3.0	---	---			.0	.0	1.0	.5
20	5.0	4.0	4.0	4.0	---	---			.5	.0	1.5	.5
21	5.0	4.5	5.0	4.0	---	---			.5	.5	1.5	1.0
22	5.5	5.0	5.0	4.0	---	---			.5	.0	1.5	1.0
23	6.5	5.5	4.5	4.5	---	---			1.0	.5	2.0	1.0
24	7.0	6.5	4.5	4.0	---	---			1.0	.5	2.0	1.5
25	6.0	4.0	4.0	3.5	---	---			1.0	1.0	2.0	1.5
26	6.0	5.5	3.5	3.0	---	---			1.0	1.0	2.0	1.5
27	6.0	6.0	3.0	2.5	---	---			1.5	1.0	2.0	1.5
28	6.0	4.0	3.0	2.5	---	---			1.5	1.0	1.5	1.0
29	6.0	4.0	3.5	3.0	---	---			1.5	1.5	2.0	1.0
30	6.5	6.0	4.0	3.0	---	---			---	---	2.0	1.5
31	6.0	5.5	---	---	---	---			---	---	2.0	1.5
MONTH	8.5	4.0	5.5	1.5					1.5	.0	2.0	.0

15106980 TONALITE CREEK NEAR TENAKEE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.5	1.5	3.5	3.0	6.5	5.0	9.0	8.5	10.5	10.0	9.5	9.0
2	2.5	1.5	3.5	2.5	7.5	5.0	10.0	8.5	10.0	9.5	9.5	9.0
3	2.5	1.5	4.0	2.5	8.0	5.5	11.5	9.0	10.0	9.5	9.5	9.0
4	2.5	1.5	4.0	2.5	8.5	6.0	11.5	9.0	10.5	9.5	9.0	8.5
5	2.5	5.0	4.5	3.5	9.0	6.5	12.0	9.5	11.0	9.5	8.5	5.0
6	2.5	1.5	4.5	3.5	9.5	5.0	11.5	10.0	11.0	9.5	8.5	8.0
7	2.5	2.0	4.0	3.5	10.0	7.5	10.0	9.5	11.0	10.0	8.5	8.0
8	2.5	2.0	4.5	3.5	10.0	7.5	10.5	9.5	11.0	10.0	8.5	8.0
9	2.5	1.5	5.5	3.5	9.0	8.0	11.0	9.5	11.0	10.5	8.5	8.0
10	2.5	2.0	5.5	3.5	10.5	7.5	11.0	10.0	12.0	10.5	8.5	7.5
11	2.5	2.0	5.5	3.0	9.5	8.5	11.0	10.0	12.0	10.5	8.0	7.5
12	2.5	1.5	6.0	4.0	9.0	8.0	11.0	10.5	12.5	11.0	8.0	6.5
13	3.0	2.0	5.0	4.0	8.0	8.0	10.5	10.0	12.5	11.5	7.5	6.0
14	2.5	2.0	5.0	4.0	8.5	8.0	11.0	10.0	11.5	10.5	8.0	7.0
15	2.5	2.0	6.5	4.0	8.5	8.0	10.5	10.0	11.0	10.0	9.0	8.0
16	2.0	2.0	5.5	4.5	8.0	7.5	10.0	9.5	10.5	10.0	9.5	9.0
17	2.5	1.5	5.0	4.5	8.5	7.5	11.0	9.5	10.5	10.0	9.5	9.0
18	2.5	2.0	5.0	4.0	9.0	7.5	11.0	9.5	10.5	10.0	9.5	8.5
19	2.5	2.0	5.0	4.5	10.0	7.5	11.0	10.0	10.0	9.5	8.5	8.5
20	2.5	2.0	5.0	4.0	9.0	7.5	10.5	10.0	10.5	9.5	8.0	7.0
21	2.5	2.0	5.5	4.0	8.5	8.0	11.0	10.5	10.0	9.5	7.5	7.0
22	2.5	2.0	5.5	4.0	8.0	8.0	11.0	10.5	10.5	9.5	8.0	7.0
23	3.0	2.0	6.5	4.0	9.0	7.5	11.0	10.5	11.0	9.5	8.0	8.0
24	3.0	2.5	7.0	4.5	10.0	8.0	11.0	10.0	10.5	9.0	8.5	7.5
25	3.0	2.5	7.0	5.0	11.0	8.5	11.0	10.0	10.5	9.5	8.5	8.0
26	3.5	2.5	7.5	5.0	10.5	9.0	11.0	10.5	10.5	9.0	8.0	8.0
27	3.0	2.5	7.5	5.0	9.0	8.5	11.0	10.0	10.0	9.0	8.5	8.0
28	3.5	2.5	6.5	5.5	9.0	8.5	11.0	10.0	10.0	9.0	8.5	8.0
29	3.0	2.5	6.5	5.0	9.5	8.5	10.5	10.0	10.0	9.0	8.0	8.0
30	3.5	2.5	6.0	5.0	9.5	8.5	10.5	10.0	10.0	9.0	8.0	8.0
31	---	---	6.0	5.0	---	---	10.5	10.0	10.0	9.0	---	---
MONTH	3.5	1.5	7.5	2.5	11.0	5.0	12.0	8.5	12.5	9.0	9.5	5.0
YEAR	12.5	.0										

15107910 WEST FORK INDIAN RIVER NEAR TENAKEE

LOCATION.--Lat 56°51'58", long 135°19'31", Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 0.7 mi (1.1 km) upstream from confluence with East Fork and 7 mi (11 km) northwest of Tenakee.

DRAINAGE AREA.--3.02 mi² (7.82 km²).

PERIOD OF RECORD.--July 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (149 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR CURRENT PERIOD.--July to September 1979: Maximum discharge during period, 87 ft³/s (2.46 m³/s) July 20, gage height, 2.27 ft (0.692 m); minimum daily, 7.9 ft³/s (0.22 m³/s) Aug. 28, 29 and Sept. 10.

Water Year 1980: Maximum discharge, 326 ft³/s (9.23 m³/s) Oct. 9, gage height, 3.12 ft (0.951 m), from rating curve extended above 120 ft³/s (3.4 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 3.6 ft³/s (0.10 m³/s) Mar. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, JULY TO SEPTEMBER 1979
MEAN VALUES

DAY	AUG	SEP	DAY	AUG	SEP	DAY	JUL	AUG	SEP	DAY	JUL	AUG	SEP
1	24	8.8	9	15	8.0	17	---	11	18	25	22	8.3	19
2	23	11	10	14	7.9	18	17	11	15	26	21	8.3	17
3	20	11	11	14	12	19	24	11	14	27	20	8.3	27
4	18	9.7	12	13	19	20	52	10	14	28	18	7.9	26
5	17	8.9	13	12	44	21	33	10	13	29	17	7.9	21
6	16	9.2	14	12	22	22	30	9.9	13	30	16	8.7	26
7	16	8.4	15	12	17	23	26	9.3	20	31	21	9.3	---
8	16	8.3	16	11	15	24	24	8.5	18				

AUGUST TOTAL - 392.4 MEAN - 12.7 MAX - 24 MIN - 7.9 CFSM - 4.21 IN. - 4.83 AC-FT - 778
SEPTEMBER TOTAL - 481.2 MEAN - 16.0 MAX - 44 MIN - 7.9 CFSM - 5.30 IN. - 5.93 AC-FT - 954

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	13	21	8.6	6.8	15	6.8	46	30	16	21	13
2	56	11	16	8.6	7.7	11	5.8	35	31	14	21	12
3	137	10	14	8.1	9.9	9.5	5.8	28	34	12	20	20
4	93	9.8	14	7.4	8.1	8.6	6.1	28	39	11	19	20
5	125	9.4	34	7.1	7.8	8.6	6.2	33	44	9.5	18	18
6	70	8.9	20	7.1	8.5	8.1	9.8	39	43	8.7	17	17
7	55	8.6	16	7.1	32	7.8	9.8	38	40	8.2	16	15
8	53	8.6	15	11	13	7.8	10	38	36	7.6	16	30
9	152	8.6	14	6.9	11	7.8	11	39	34	8.2	15	29
10	61	8.2	13	18	9.6	7.7	11	39	29	8.4	14	23
11	53	8.2	12	8.6	9.1	7.3	17	37	28	7.1	13	19
12	52	7.8	11	7.5	9.0	7.1	24	40	25	6.0	13	19
13	41	13	12	6.5	9.0	6.7	18	40	31	11	13	18
14	39	36	11	6.5	9.0	6.5	16	37	31	13	12	18
15	32	31	10	6.5	9.0	5.9	14	37	26	11	12	17
16	31	28	9.9	6.4	8.4	5.2	14	37	22	9.8	16	16
17	33	26	9.8	6.2	8.2	4.5	15	38	22	11	17	15
18	27	18	30	6.2	8.1	4.0	15	37	20	9.2	14	19
19	24	46	34	6.2	7.5	3.6	16	35	18	9.0	14	25
20	21	76	24	6.2	7.5	5.9	18	32	19	11	14	16
21	20	53	21	6.2	7.5	6.3	21	28	16	13	13	16
22	19	52	16	19	7.1	7.1	23	28	20	16	12	22
23	18	36	15	14	7.1	10	20	27	21	16	12	22
24	17	29	14	9.0	7.1	7.1	18	29	17	15	11	34
25	16	24	13	7.9	7.1	6.5	18	31	17	14	11	36
26	15	21	12	7.5	7.3	6.6	23	32	16	14	11	25
27	14	18	12	7.5	7.7	6.8	27	36	14	14	11	24
28	14	17	11	7.5	8.6	7.8	27	35	13	13	10	26
29	13	16	10	6.8	9.7	9.0	27	34	12	13	14	46
30	13	22	9.5	6.8	---	8.3	39	31	11	19	12	46
31	13	---	8.6	6.8	---	6.8	---	31	---	25	11	---
TOTAL	1389	674.1	482.8	255.7	268.4	230.9	492.3	1075	759	373.7	443	676
MEAN	44.8	22.5	15.6	8.25	9.26	7.45	16.4	34.7	25.3	12.1	14.3	22.5
MAX	152	76	34	19	32	15	39	46	44	25	21	46
MIN	13	7.8	8.6	6.2	6.8	3.6	5.8	27	11	6.0	10	12
CFSM	14.8	7.45	5.17	2.73	3.07	2.47	5.43	11.5	8.38	4.01	4.74	7.45
IN.	17.10	8.30	5.95	3.15	3.31	2.84	6.06	13.24	9.35	4.60	5.46	8.32
AC-FT	2760	1340	958	507	532	458	976	2130	1510	741	879	1340

WTR YR 1980 TOTAL 7119.9 MEAN 19.5 MAX 152 MIN 3.6 CFSM 6.46 IN 87.67 AC-FT 14120

15107920 INDIAN RIVER NEAR TENAKEE

LOCATION.--Lat 57°49'50", long 135°16'00", in Hydrologic Unit 19060000, on Chichagof Island, in Tongas National Forest, on left bank 5 mi (8 km) upstream from mouth and 4 mi (6 km) northwest of Tenakee.

DRAINAGE AREA.--12.9 mi² (33.4 km²).

GAGE.--Water-stage recorder. Altitude of gage is 330 ft (100 m), from topographic map.

REMARKS.--Records good except those for Dec. 28 to Feb. 25, which are fair.

AVERAGE DISCHARGE.--5 years, 83.6 ft³/s (2.368 m³/s), 88.01 in/yr (2,235 mm/yr), 60,570 acre-ft/yr (74.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s (53.8 m³/s) Sept. 15, 1976, gage height, 8.03 ft (2.478 m), from rating curve extended above 1,100 ft³/s (31 m³/s); minimum daily, 5.0 ft³/s (0.14 m³/s) Feb. 19 and 20, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (20 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 3	1330	984	27.9	4.83	1.472	Nov. 20	0345	713	20.2	3.58	1.091
Oct. 9	0600	*1,120	31.7	*5.19	1.582						

Minimum daily discharge, 6.8 ft³/s (0.19 m³/s) Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	348	75	164	36	38	108	36	250	125	69	109	25
2	241	63	100	35	44	61	37	177	119	61	90	8.1
3	636	58	82	34	49	46	45	136	143	48	80	63
4	350	54	101	32	55	39	50	123	164	43	76	55
5	476	48	311	31	63	33	66	147	191	38	57	53
6	211	44	131	30	67	28	68	181	183	35	49	35
7	157	39	92	28	70	25	65	173	168	33	43	22
8	179	37	77	27	68	30	64	171	149	34	37	132
9	668	35	65	26	62	36	65	172	125	38	32	108
10	273	33	58	25	55	27	68	175	106	28	28	53
11	284	33	57	24	48	20	128	163	102	24	22	36
12	250	31	55	23	45	16	171	171	101	26	17	26
13	199	76	53	23	42	12	109	175	161	61	16	18
14	192	260	51	24	39	8.5	94	152	165	57	14	16
15	152	236	51	25	37	8.7	79	153	115	38	9.4	14
16	146	198	51	25	35	7.7	87	169	101	41	62	12
17	171	186	51	24	33	8.2	92	185	92	45	66	7.3
18	128	120	51	24	32	9.8	104	161	79	33	35	28
19	114	231	276	25	31	16	113	150	73	46	42	115
20	102	451	187	26	31	27	104	143	67	52	36	28
21	92	317	136	27	30	48	130	125	68	61	26	27
22	88	284	88	28	30	52	155	116	98	52	18	111
23	96	176	70	30	31	36	119	110	86	60	16	86
24	85	137	58	31	33	28	98	122	69	49	9.9	257
25	80	114	58	31	35	23	111	130	61	41	6.8	158
26	75	98	56	30	38	25	135	135	59	37	51	73
27	72	87	51	29	47	28	149	155	55	33	48	57
28	69	82	47	29	54	59	147	152	53	33	50	72
29	71	76	44	31	63	46	150	137	48	42	23	226
30	81	137	42	33	---	38	211	139	43	96	54	245
31	76	---	39	35	---	35	---	143	---	136	59	---
TOTAL	6162	3816	2753	881	1305	984.9	3050	4791	3169	1490	1282.1	2166.4
MEAN	199	127	88.8	28.4	45.0	31.8	102	155	106	48.1	41.4	72.2
MAX	668	451	311	36	70	108	211	250	191	136	109	257
MIN	69	31	39	23	30	7.7	36	110	43	24	6.8	7.3
CFSM	15.4	9.85	6.88	2.20	3.49	2.47	7.91	12.0	8.22	3.73	3.21	5.60
IN.	17.77	11.00	7.94	2.54	3.76	2.84	8.79	13.81	9.14	4.30	3.70	6.25
AC-FT	12220	7570	5460	1750	2590	1950	6050	9500	6290	2960	2540	4300

CAL YR 1979 TOTAL 28921.6 MEAN 79.2 MAX 668 MIN 5.0 CFSM 6.14 IN 83.40 AC-FT 57370
WTR YR 1980 TOTAL 31850.4 MEAN 87.0 MAX 668 MIN 6.8 CFSM 6.74 IN 91.84 AC-FT 63180

NOTE.--No gage-height record Jan. 19 to Feb. 25.

15108000 PAVLOF RIVER NEAR TENAKEE

LOCATION.--Lat 57°50'30", long 135°02'09", Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on left bank 250 ft (76 m) upstream from falls at outlet of Pavlof Lake, 0.1 mi (0.2 km) upstream from mouth at Pavlof Harbor, and 8 mi (13 km) northeast of Tenakee.

DRAINAGE AREA.--24.3 mi² (62.9 km²).

PERIOD OF RECORD.--June 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--23 years, 164 ft³/s (4.65 m³/s), 91.65 in/yr (2,328 mm/yr), 118,800 acre-ft/yr (148 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft³/s (131 m³/s) Oct. 30, 1978, gage height, 9.28 ft (2.829 m), from rating curve extended above 1,200 ft³/s (34 m³/s); minimum, 6.8 ft³/s (0.19 m³/s) Jan. 16-18, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 3	1530	1,880	53.2	7.13	2.173	Oct. 9	1030	*2,200	62.3	*7.44	2.268
Oct. 5	1200	1,690	47.9	6.94	2.116						

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Mar. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	901	153	70	55	50	70	84	485	199	127	344	150
2	741	118	60	50	70	50	89	358	175	175	261	140
3	1430	93	55	48	80	38	107	237	168	136	206	250
4	736	92	55	44	75	28	102	196	199	118	185	450
5	1230	92	50	42	85	20	118	196	241	113	136	340
6	395	84	48	38	100	16	133	290	265	113	113	240
7	256	44	46	36	120	14	133	253	241	113	100	180
8	214	40	44	34	80	15	136	265	221	115	95	520
9	1700	37	42	32	70	15	136	245	196	120	85	440
10	652	36	38	28	60	15	121	241	158	105	80	310
11	497	34	36	23	50	14	362	233	148	94	75	220
12	555	32	36	21	45	13	552	214	152	99	70	160
13	328	108	34	20	40	13	241	225	299	107	80	120
14	261	608	32	21	36	13	175	221	312	148	100	110
15	195	651	30	22	32	12	185	210	233	124	95	95
16	160	636	28	22	30	26	260	206	196	118	400	140
17	261	488	28	22	26	30	282	213	203	130	550	140
18	203	282	70	23	22	34	479	221	142	85	230	140
19	140	425	180	24	22	55	406	237	130	95	210	260
20	115	670	150	26	24	99	245	312	121	100	190	180
21	97	490	130	28	24	124	312	221	113	110	170	140
22	90	350	100	30	26	214	463	192	178	121	160	220
23	136	250	85	32	28	118	294	168	214	136	150	500
24	137	180	80	32	30	77	233	164	155	155	130	800
25	100	150	80	32	34	59	321	164	142	113	120	700
26	92	110	75	30	36	82	348	168	130	92	110	540
27	127	90	70	30	40	107	524	185	127	82	100	400
28	145	75	70	30	45	214	339	168	124	89	95	350
29	114	65	65	32	50	142	321	196	116	118	320	520
30	129	65	60	32	---	99	401	192	113	290	180	700
31	127	---	55	34	---	92	---	203	---	392	110	---
TOTAL	12264	6548	2002	973	1430	1918	7902	7079	5411	4033	5250	9455
MEAN	396	218	64.6	31.4	49.3	61.9	263	228	180	130	169	315
MAX	1700	670	180	55	120	214	552	485	312	392	550	800
MIN	90	32	28	20	22	12	84	164	113	82	70	95
CFSM	16.3	8.97	2.66	1.29	2.03	2.55	10.8	9.38	7.41	5.35	6.96	13.0
IN.	18.77	10.02	3.06	1.49	2.19	2.94	12.10	10.84	8.28	6.17	8.04	14.47
AC-FT	24330	12990	3970	1930	2840	3800	15670	14040	10730	8000	10410	18750

CAL YR 1979 TOTAL 61015 MEAN 167 MAX 1700 MIN 18 CFSM 6.87 IN 93.40 AC-FT 121000
WTR YR 1980 TOTAL 64265 MEAN 176 MAX 1700 MIN 12 CFSM 7.24 IN 98.38 AC-FT 127500

NOTE.--No gage-height record Nov. 20 to Mar. 13 and Aug. 7 to Sept. 30.

15195000 DICK CREEK NEAR CORDOVA

LOCATION.--Lat 60°20'32", long 144°18'10", in NW¼ sec.2, T.18 S., R.6 E., Hydrologic Unit 19050003, Chugach National Forest, on left bank 1.2 mi (1.9 km) upstream from mouth at Bering Lake, and 52 mi (84 km) southeast of Cordova.

DRAINAGE AREA.--7.95 mi^2 (20.59 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (9 m), from topographic map. Prior to Sept. 23, 1972 at site 100 ft (30 m) downstream at same datum.

REMARKS.--Water-discharge records fair.

AVERAGE DISCHARGE.--10 years, 130 ft^3/s (3.682 m^3/s), 222.06 in/yr (5,640 mm/yr), 94,180 acre-ft/yr (116 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft^3/s (67.4 m^3/s) Sept. 18, 1975, gage height, 8.95 ft (2.728 m), from rating curve extended above 940 ft^3/s (27 m^3/s) on basis of slope-conveyance study; minimum daily, about 3.5 ft^3/s (0.10 m^3/s) Feb. 15-18, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 8	2130	*2,130	60.3	*8.73	2.661	Sept.13	1230	1,870	53.0	8.47	2.582
Oct. 30	2030	2,090	59.2	8.69	2.649	Sept.30	0700	1,890	53.5	8.49	2.588
Nov. 15	2400	1,660	47.0	8.26	2.518						

Minimum discharge, 5.0 ft^3/s (0.14 m^3/s) Jan. 13-17, gage height, 4.56 ft (1.390 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	687	123	65	8.7	462	41	137	336	168	102	187	57
2	494	72	46	7.7	423	30	329	227	183	117	218	82
3	495	52	32	7.0	161	24	160	166	233	115	377	47
4	542	39	26	7.0	48	21	94	116	317	102	125	37
5	688	32	23	6.6	366	21	83	97	335	110	94	31
6	297	27	18	6.2	380	20	69	197	329	352	82	27
7	129	25	16	6.2	120	18	127	298	277	774	287	39
8	742	23	14	6.2	37	33	141	236	223	272	662	224
9	808	24	12	6.0	59	35	92	166	194	144	627	262
10	290	97	12	5.7	168	25	89	140	209	105	195	98
11	491	653	10	5.7	100	21	601	155	204	280	103	58
12	509	956	9.9	5.7	70	18	612	135	289	752	78	44
13	314	724	9.0	5.5	50	15	235	129	542	492	85	557
14	103	104	8.6	5.0	35	13	117	170	214	179	68	201
15	76	148	8.1	5.0	25	12	73	226	212	123	56	137
16	68	320	7.0	5.0	22	13	65	213	203	102	71	86
17	130	56	12	5.0	20	16	57	490	196	101	66	60
18	59	32	305	18	18	14	63	703	188	87	99	49
19	43	134	34	64	16	13	87	397	148	89	70	41
20	34	91	23	46	15	12	95	210	183	97	55	37
21	30	470	18	602	15	12	168	137	233	91	112	34
22	28	422	14	525	15	13	142	114	171	94	238	47
23	115	84	12	43	150	12	93	118	163	102	94	70
24	727	45	12	12	100	12	62	128	160	104	61	215
25	177	30	11	12	50	21	112	142	145	88	47	72
26	74	24	10	9.8	21	40	345	141	199	100	40	174
27	58	89	9.8	9.2	144	42	367	134	151	216	35	471
28	47	695	9.2	6.9	327	48	369	139	116	400	32	123
29	550	518	9.1	6.0	76	40	217	137	111	534	28	646
30	1070	104	8.7	6.2	---	42	291	781	138	731	25	1130
31	401	---	8.7	35	---	61	---	259	---	522	144	---
TOTAL	10276	6213	813.1	1499.3	3493	758	5492	7037	6434	7477	4461	5156
MEAN	331	207	26.2	48.4	120	24.5	183	227	214	241	144	172
MAX	1070	956	305	602	462	61	612	781	542	774	662	1130
MIN	28	23	7.0	5.0	15	12	57	97	111	87	25	27
CFSM	41.6	26.0	3.30	6.09	15.1	3.08	23.0	28.6	26.9	30.3	18.1	21.6
IN.	48.08	29.07	3.80	7.01	16.34	3.55	25.69	32.92	30.10	34.98	20.87	24.12
AC-FT	20380	12320	1610	2970	6930	1500	10890	13960	12760	14830	8850	10230

CAL YR 1979 TOTAL 48315.1 MEAN 132 MAX 1400 MIN 3.5 CFSM 16.6 IN 226.05 AC-FT 95830
WTR YR 1980 TOTAL 59109.4 MEAN 162 MAX 1130 MIN 5.0 CFSM 20.4 IN 276.55 AC-FT 117200

15195000 DICK CREEK NEAR CORDOVA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV									
08...	1030	24	3.5	<1.0	11.5	28	10	.7	2.6

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV								
08...	.1	13	1.4	.07	.030	.000	1	.06

15208000 TONSINA RIVER AT TONSINA

LOCATION.--Lat 61°39'41", long 145°11'02", in SW¼SW¼ sec.26, T.2 S., R.1 E., Hydrologic Unit 19050003, on right bank 0.2 mi (0.3 km) upstream from Richardson Highway crossing at Tonsina, 0.6 mi (1.0 km) upstream from Bernard Creek, and 0.8 mi (1.3 km) upstream from Squirrel Creek.

DRAINAGE AREA.--420 mi^2 (1,090 km^2), approximately.

PERIOD OF RECORD.--May 1950 to December 1954, January to September 1955 (fragmentary), October 1955 to current year.

REVISED RECORDS.--WDR AK-75-1: 1974.

GAGE.--Water-stage recorder. Altitude of gage is 1,500 ft (460 m), from topographic map. Prior to Oct. 16, 1957, at site 800 ft (240 m) downstream at different datum. Oct. 17, 1957 to Apr. 18, 1967, June 9, 1973 to Apr. 17, 1974, nonrecording gage and Apr. 19, 1967 to June 8, 1973, water-stage recorder at site 0.2 mi (0.3 km) downstream at prior datum. Apr. 18, 1974 to May 30, 1975, nonrecording gage at present site and datum.

REMARKS.--Records good except those for Apr. 1 to May 9, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years (water years 1951-54, 1956-80), 838 ft^3/s (23.73 m^3/s), 27.09 in/yr (688 mm/yr), 607,100 acre-ft/yr (749 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,490 ft^3/s (240 m^3/s) June 17, 1962, gage height, 4.91 ft (1.497 m), from graph based on gage readings, site and datum then in use; maximum gage height, 7.00 ft (2.134 m) June 8, 1957, from graph based on gage readings, site and datum then in use; minimum daily discharge, about 35 ft^3/s (0.99 m^3/s) Mar. 11 to Apr. 20, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,500 ft^3/s (127 m^3/s) June 12, gage height, 21.45 ft (6.538 m); minimum daily, about 130 ft^3/s (3.7 m^3/s) Mar. 11 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	498	386	190	180	170	140	130	200	1520	3350	3230	1020
2	470	360	190	180	170	140	130	220	1540	3230	3110	1030
3	458	340	190	180	170	140	130	240	1580	3150	2920	1010
4	451	320	190	180	170	140	130	260	1760	3150	2750	952
5	464	300	190	180	170	140	130	280	2190	3150	2590	894
6	484	280	180	180	170	140	130	320	2660	3210	2440	851
7	470	280	180	180	170	140	130	380	3260	3450	2430	800
8	451	260	180	170	160	140	130	460	4000	3620	2540	749
9	580	260	180	170	160	140	130	550	4460	3620	2660	715
10	851	240	180	170	160	140	130	640	4370	3510	2670	678
11	1030	240	180	170	160	130	140	700	4330	3320	2720	648
12	1080	241	180	170	160	130	140	640	4400	3350	2670	618
13	1050	241	180	170	160	130	140	670	4030	3570	2570	595
14	1060	241	180	170	160	130	140	732	3510	3730	2420	602
15	904	223	180	170	160	130	140	766	3290	3780	2220	640
16	834	272	180	170	160	130	140	783	3210	3740	1990	817
17	774	250	180	170	150	130	140	758	3170	3560	1800	999
18	708	220	180	170	150	130	150	749	3150	3320	1700	1150
19	640	210	180	170	150	130	150	766	3060	3140	1680	1200
20	580	200	180	170	150	130	150	826	2910	2980	1650	1160
21	520	200	180	170	150	130	150	851	2750	2970	1570	1100
22	477	200	180	170	150	130	150	851	2570	2980	1510	1040
23	451	190	180	170	150	130	150	876	2470	3000	1420	961
24	440	190	180	170	150	130	150	904	2560	3060	1320	904
25	420	190	180	170	150	130	160	923	2780	3150	1220	834
26	400	190	180	170	140	130	160	999	2950	3170	1140	783
27	399	190	180	170	140	130	160	1090	3110	3200	1080	740
28	386	190	180	170	140	130	170	1190	3230	3230	1050	700
29	373	190	180	170	140	130	180	1280	3420	3260	1030	670
30	360	190	180	170	---	130	190	1350	3460	3320	970	632
31	386	---	180	170	---	130	---	1430	---	3310	970	---
TOTAL	18449	7284	5630	5340	4540	4130	4350	22684	91700	102580	62040	25492
MEAN	595	243	182	172	157	133	145	732	3057	3309	2001	850
MAX	1080	386	190	180	170	140	190	1430	4460	3780	3230	1200
MIN	360	190	180	170	140	130	130	200	1520	2970	970	595
CFSM	1.42	.58	.43	.41	.37	.32	.35	1.74	7.28	7.88	4.76	2.02
IN.	1.63	.65	.50	.47	.40	.37	.39	2.01	8.12	9.09	5.49	2.26
AC-FT	36590	14450	11170	10590	9010	8190	8630	44990	181900	203500	123100	50560

CAL YR 1979 TOTAL 291346 MEAN 798 MAX 2830 MIN 90 CFSM 1.90 IN 25.80 AC-FT 577900
WTR YR 1980 TOTAL 354219 MEAN 968 MAX 4460 MIN 130 CFSM 2.31 IN 31.37 AC-FT 702600

NOTE.--No gage-height record Oct. 19 to May 10.

15212000 COPPER RIVER NEAR CHITINA
(National stream-quality accounting network station)

LOCATION.--Lat 61°27'56", long 144°27'21", in SW¼NE¼ sec.2, T.5 S., R.5 E., Hydrologic Unit 19050003, on right bank at head of Woods Canyon, 0.5 mi (0.8 km) downstream from Taral Creek and abandoned Indian village of Taral, 2.2 mi (3.5 km) upstream from Tenas Creek, and 3.5 mi (5.6 km) south of Chitina.

DRAINAGE AREA.--20,600 mi^2 (53,400 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1950, May to November 1952, October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (122 m), from topographic map. Prior to June 2, 1952, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 1.4 ft (0.43 m) higher.

REMARKS.--Records poor for period of no gage-height record prior to May 14, good thereafter. Streamflow augmented by glaciers, which cover 17 percent of the basin.

AVERAGE DISCHARGE.--25 years, 37,280 ft^3/s (1,056 m^3/s), 24.58 in/yr (624 mm/yr), 27,010,000 acre-ft/yr (33.3 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 265,000 ft^3/s (7,500 m^3/s) July 15, 1971, gage height, 29.94 ft (9.126 m), from rating curve extended above 170,000 ft^3/s (4,800 m^3/s); minimum daily, about 2,000 ft^3/s (57 m^3/s) Mar. 1-31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 161,000 ft^3/s (4,560 m^3/s) July 23, gage height, 20.9 ft (6.37 m), minimum daily, about 6,000 ft^3/s (170 m^3/s) Mar. 11 to Apr. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28000	16000	9500	8000	7000	6500	6000	8500	46300	116000	123000	50500
2	28000	16000	9500	8000	7000	6500	6000	9500	45700	110000	119000	50800
3	26000	15000	9500	8000	7000	6500	6000	11000	47200	107000	112000	49000
4	26000	15000	9500	8000	7000	6500	6000	12000	55000	108000	108000	43600
5	26000	14000	9500	8000	7000	6500	6000	14000	68400	109000	108000	39400
6	28000	14000	9000	8000	7000	6500	6000	17000	92400	118000	108000	38000
7	26000	14000	9000	8000	7000	6500	6000	20000	115000	129000	113000	36000
8	26000	13000	9000	8000	7000	6500	6000	24000	127000	138000	122000	34000
9	34000	13000	9000	8000	7000	6500	6000	28500	127000	146000	133000	32000
10	45400	13000	9000	8000	7000	6500	6000	30000	120000	144000	125000	30000
11	44800	13000	9000	8000	7000	6000	6000	30000	116000	140000	126000	30000
12	42400	12000	9000	8000	7000	6000	6000	30000	110000	148000	129000	30500
13	40600	12000	9000	8000	7000	6000	6000	30000	97600	152000	131000	32000
14	38800	12000	9000	8000	7000	6000	6000	30000	88400	149000	127000	39400
15	36000	12000	9000	8000	7000	6000	6000	30000	83200	148000	109000	49000
16	34000	11000	8500	7500	7000	6000	6000	28000	81600	146000	97600	64900
17	30000	11000	8500	7500	7000	6000	6000	28000	82800	144000	90800	70000
18	28000	11000	8500	7500	7000	6000	6000	28000	80400	136000	88800	60600
19	26000	11000	8500	7500	7000	6000	6000	28000	75600	132000	86800	55700
20	26000	11000	8500	7500	6500	6000	6500	28000	75600	130000	81200	51400
21	24000	11000	8500	7500	6500	6000	6500	28000	73800	132000	78000	50500
22	22000	10000	8500	7500	6500	6000	6500	28000	70800	137000	74800	49600
23	22000	10000	8500	7500	6500	6000	6500	28000	71600	154000	68800	48400
24	22000	10000	8500	7500	6500	6000	7000	28000	77200	146000	65200	47800
25	20000	10000	8500	7500	6500	6000	7000	30000	84400	142000	62000	47800
26	19000	10000	8500	7500	6500	6000	7000	32000	90800	144000	58500	48400
27	19000	10000	8500	7500	6500	6000	7000	36000	96700	144000	56400	47200
28	18000	10000	8500	7500	6500	6000	7500	38200	105000	135000	54600	44800
29	18000	9500	8500	7500	6500	6000	8000	40600	115000	140000	53800	43000
30	17000	9500	8500	7000	---	6000	8000	44200	118000	132000	53200	40000
31	16000	---	8500	7000	---	6000	---	46600	---	130000	50800	---
TOTAL	857000	359000	273500	239000	198000	191000	191500	844100	2638500	4186000	2914300	1354300
MEAN	27650	11970	8823	7710	6828	6161	6383	27230	87950	135000	94010	45140
MAX	45400	16000	9500	8000	7000	6500	8000	46600	127000	154000	133000	70000
MIN	16000	9500	8500	7000	6500	6000	6000	8500	45700	107000	50800	30000
CFSM	1.34	.58	.43	.37	.33	.30	.31	1.32	4.27	6.55	4.56	2.19
IN.	1.55	.65	.49	.43	.36	.34	.35	1.52	4.76	7.56	5.26	2.45
AC-FT	1700000	712100	542500	474100	392700	378800	379800	1674000	5233000	8303000	5781000	2686000

CAL YR 1979 TOTAL 15756100 MEAN 43170 MAX 168000 MIN 6500 CFSM 2.10 IN 28.45 AC-FT 31250000
WTR YR 1980 TOTAL 14246200 MEAN 38920 MAX 154000 MIN 6000 CFSM 1.89 IN 25.73 AC-FT 28260000

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-58, 1963-72, 1974-75, 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
MAR										
18...	1431	58	272	.0	12.2	85	115	0	28	410
18...	1432	103	280	.0	12.8	90	115	0	27	470
18...	1433	150	280	.0	12.5	87	115	0	27	470

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	PER-CENT OF TOTAL DEPTH	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
JUN									
05...	1431	175	4.20	20	155	7.8	11.1	10.0	92
05...	1432	175	4.20	80	--	--	11.1	--	--
05...	1433	470	15.1	20	155	7.7	11.1	--	--
05...	1434	470	15.1	80	--	--	11.3	--	--
05...	1435	540	25.3	20	155	7.7	12.1	9.9	92
05...	1436	540	25.3	80	--	--	12.0	--	--
05...	1437	575	30.5	20	152	7.7	12.2	--	--
05...	1438	575	30.5	80	--	--	12.4	--	--
05...	1439	630	31.5	20	150	7.8	12.5	9.7	92
05...	1440	630	31.5	80	--	--	12.5	--	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)
JUN					
26...	1301	155	130	8.2	--
26...	1302	285	135	8.1	--
26...	1303	405	140	7.8	11.7
26...	1304	545	140	8.0	--
26...	1305	640	135	7.8	11.8

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	PER-CENT OF TOTAL DEPTH	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
JUL								
24...	1301	660	--	140	7.8	--	11.6	107
24...	1302	580	--	135	7.9	--	--	--
24...	1303	485	--	130	8.0	--	11.4	104
24...	1304	360	--	128	8.0	--	--	--
24...	1305	230	--	128	8.0	--	11.6	103
24...	1311	725	60	--	--	12.3	--	--
24...	1312	660	60	--	--	11.7	--	--
24...	1313	580	60	--	--	11.1	--	--
24...	1314	485	60	--	--	10.7	--	--
24...	1315	360	60	--	--	10.1	--	--
24...	1316	230	60	--	--	9.5	--	--
24...	1317	105	60	--	--	9.0	--	--
24...	1318	55	60	--	--	9.3	--	--

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	PER- CENT OF TOTAL DEPTH	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)
SEP						
12...	1701	140	20	200	7.8	5.3
12...	1702	140	60	--	--	5.2
12...	1704	195	20	195	7.8	5.6
12...	1705	195	60	--	--	5.5
12...	1707	240	20	188	7.9	5.1
12...	1708	240	60	--	--	5.7
12...	1710	280	20	190	7.9	5.9
12...	1711	280	60	--	--	5.9
12...	1713	305	20	190	7.8	5.9
12...	1714	305	60	--	--	5.9
12...	1716	335	20	192	7.8	5.9
12...	1717	335	60	--	--	5.9
12...	1719	355	20	195	7.8	6.0
12...	1720	355	60	--	--	5.9
12...	1721	375	20	195	7.9	5.9
12...	1722	375	60	--	--	5.8
12...	1724	395	20	195	7.9	5.9
12...	1725	395	60	--	--	5.8
12...	1727	410	20	195	7.9	5.7
12...	1728	410	60	--	--	5.7

DATE	TIME	STREAM WIDTH (FT)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
MAR										
18...	1430	257	6200	280	7.5	--	.0	4.5	748	<1
JUN										
05...	1430	685	71000	155	7.8	21.0	--	610	752	K21
26...	1300	705	92000	140	7.8	12.5	12.5	410	749	K17
JUL										
24...	1300	735	156000	135	8.0	14.5	--	370	751	K11
SEP										
12...	1700	440	30700	195	7.8	10.0	--	72	--	<1

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
MAR										
18...	<1	120	26	35	7.1	11	1.6	110	0	27
JUN										
05...	K4	66	13	21	3.4	4.2	1.7	--	--	15
26...	K9	59	8	19	2.9	3.1	1.3	62	0	18
JUL										
24...	K4	59	8	19	2.7	3.0	1.4	54	0	15
SEP										
12...	K11	85	28	26	4.9	5.9	1.6	80	0	27

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
MAR										
18...	13	.2	13	179	163	.13	.13	.000	.000	.17
JUN										
05...	3.9	.1	6.0	87	88	.09	.06	.080	.010	.72
26...	2.6	.1	4.9	78	83	.04	.03	.040	.030	.50
JUL										
24...	2.3	.8	18	80	93	.04	.03	.020	.000	.34
SEP										
12...	5.5	.1	7.3	108	113	--	.00	--	.000	--

K NON-IDEAL COLONY COUNT

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
MAR										
18...	.15	.17	.02	.15	.30	.28	.040	.030	--	1.0
JUN										
05...	.39	.80	.40	.40	.89	.46	1.500	.030	--	20
26...	.53	.54	.00	.56	.58	.59	.090	.010	5.5	--
JUL										
24...	.27	.36	.09	.27	.40	.30	1.800	.010	--	--
SEP										
12...	.23	.32	--	.23	--	.23	--	.020	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
MAR											
18...	1430	0	0	2	100	60	40	0	0	<1	0
JUN											
05...	1430	16	14	2	500	500	30	1	--	<1	70
26...	1300	--	--	--	--	--	--	--	--	--	--
JUL											
24...	1300	16	13	3	400	400	0	0	0	0	90

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
MAR											
18...	0	0	0	0	<3	6	4	2	380	350	30
JUN											
05...	70	0	21	--	<3	150	140	11	51000	51000	220
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
24...	90	0	22	22	0	150	150	3	72000	72000	90

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
MAR											
18...	0	0	0	10	7	3	.0	.0	.0	4	4
JUN											
05...	23	23	0	1200	1200	8	.3	.2	.1	56	52
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
24...	19	19	0	1500	1500	10	.2	.1	.1	61	60

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
MAR										
18...	0	1	0	1	0	0	0	20	20	<3
JUN										
05...	4	1	1	0	0	0	0	180	170	10
26...	--	--	--	--	1	--	--	--	--	--
JUL										
24...	1	1	1	0	5	5	0	190	180	10

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
MAR											
18...	1430	16	268	--	--	--	--	--	--	--	--
JUN											
05...	1430	2420	464000	--	--	--	--	*67	--	--	--
26...	1300	1200	298000	23	34	44	54	63	74	95	100
JUL											
24...	1300	2910	1230000	--	--	--	--	*68	--	--	--

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	MAR 18,80	JUN 26,80	JUL 24,80	SEP 12,80
TIME	1430	1300	1300	1700
TOTAL CELLS/ML	13	2500	140	44
DIVERSITY: DIVISION	0.0	0.1	0.0	0.0
.CLASS	0.0	0.1	0.0	0.0
..ORDER	0.0	0.1	0.0	0.0
...FAMILY	0.0	0.1	0.0	0.9
....GENUS	0.0	0.2	0.0	0.9

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	140#	100	--	-
..PENNALES								
...FRAGILARIACEAE								
....HANNAEA	--	-	14	1	--	-	--	-
....SYNEDRA	13#	100	14	1	--	-	29#	67
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	14	1	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	15#	33
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	2400#	98	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

* SIEVE ANALYSES

15216000 POWER CREEK NEAR CORDOVA

LOCATION.--Lat 60°35'14", long 145°37'05", Hydrologic Unit 19050003, on right bank at old bridge site, 1 mi (1.6 km) upstream from Eyak Lake, and 5.5 mi (8.8 km) northeast of Cordova.

DRAINAGE AREA.--20.5 mi² (53.1 km²).

PERIOD OF RECORD.--July to November 1913 (fragmentary), August 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 33.5 ft (10.21 m) National Geodetic Vertical Datum of 1929 (river profile survey). July to November 1913, nonrecording gage 0.5 mi (0.8 km) upstream at different datum. August 1947 to March 1960, water-stage recorder on left bank at same datum.

REMARKS.--Records good except those for the period of no gage-height record, Dec. 10 to Feb. 4, which are poor. Streamflow augmented by glaciers, which cover 27 percent of the basin.

AVERAGE DISCHARGE.--33 years, 247 ft³/s (6.995 m³/s), 163.62 in/yr (4,156 mm/yr), 179,000 acre-ft/yr (221 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 5,540 ft³/s (157 m³/s) Sept. 25, 1949, gage height, 7.65 ft (2.332 m), from rating curve extended above 2,300 ft³/s (65 m³/s); minimum recorded, 13 ft³/s (0.37 m³/s) Apr. 29, 1950, gage height, 1.50 ft (0.457 m), but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft³/s (48 m³/s), revised, and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 5	0630	3,610	102	5.62	1.713	July 27	2100	1,800	51.0	4.77	1.454
Oct. 9	0700	*3,640	103	*5.63	1.716	Sept.30	0800	1,860	52.7	4.81	1.466

Minimum daily discharge, about 25 ft³/s (0.71 m³/s) Jan. 2-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	682	303	198	30	50	77	42	158	296	368	552	296
2	634	225	164	25	100	71	92	174	284	380	723	305
3	809	184	144	25	80	67	79	174	308	385	872	251
4	937	159	137	25	200	65	65	150	450	368	576	210
5	2470	140	120	25	504	65	62	140	552	415	498	192
6	978	127	103	25	400	59	57	178	582	594	480	182
7	520	124	94	25	251	57	62	215	606	695	737	178
8	748	120	87	25	156	58	72	200	522	612	872	272
9	2330	181	81	25	138	56	63	186	470	522	970	460
10	1120	368	75	25	192	51	60	221	480	455	936	275
11	833	1220	70	30	172	49	80	210	475	674	612	221
12	661	746	65	30	134	47	108	186	425	1070	510	195
13	550	552	60	30	109	46	197	184	385	824	470	305
14	380	321	60	35	94	45	124	205	364	695	420	385
15	301	309	55	40	85	44	92	236	336	600	336	390
16	261	493	55	60	80	44	80	236	364	522	336	333
17	245	252	55	100	74	42	73	302	498	486	352	284
18	205	190	55	80	71	41	70	348	470	460	824	242
19	181	197	55	150	71	39	68	305	368	460	465	215
20	163	203	50	200	68	38	68	245	420	475	450	192
21	149	286	50	250	60	43	79	207	425	492	445	180
22	138	659	50	250	58	38	83	197	364	475	660	176
23	154	275	45	200	108	37	79	200	376	492	420	205
24	905	186	40	100	95	36	74	202	410	498	344	284
25	441	160	40	60	80	36	82	215	415	498	299	227
26	248	142	40	50	73	37	95	224	492	486	284	275
27	199	136	40	45	72	37	117	221	430	920	272	558
28	194	203	35	40	88	35	132	227	410	1340	263	293
29	280	602	35	35	84	34	132	230	390	880	248	340
30	779	281	30	35	---	36	136	405	372	960	230	1170
31	629	---	30	40	---	35	---	405	---	660	281	---
TOTAL	19124	9344	2218	2115	3747	1465	2623	6986	12739	18761	15737	9091
MEAN	617	311	71.5	68.2	129	47.3	87.4	225	425	605	508	303
MAX	2470	1220	198	250	504	77	197	405	606	1340	970	1170
MIN	138	120	30	25	50	34	42	140	284	368	230	176
CFSM	30.1	15.2	3.49	3.33	6.29	2.31	4.26	11.0	20.7	29.5	24.8	14.8
IN.	34.70	16.96	4.02	3.84	6.80	2.66	4.76	12.68	23.12	34.04	28.56	16.50
AC-FT	37930	18530	4400	4200	7430	2910	5200	13860	25270	37210	31210	18030

CAL YR 1979 TOTAL 105483 MEAN 289 MAX 2470 MIN 23 CFSM 14.1 IN 191.40 AC-FT 209200
WTR YR 1980 TOTAL 103950 MEAN 284 MAX 2470 MIN 25 CFSM 13.9 IN 188.62 AC-FT 206200

15219000 WEST FORK OLSEN BAY CREEK NEAR CORDOVA

LOCATION.--Lat 60°45'41", long 146°10'20", in NW¼NE¼ sec.7, T.13 S., R.5 W., Hydrologic Unit 19050003, in Chugach National Forest, on left bank 600 ft (200 m) upstream from confluence with East Fork, and 21 mi (34 km) northwest of Cordova.

DRAINAGE AREA.--4.78 mi² (12.38 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1964 to September 1980 (discontinued).

REVISED RECORDS.--WSP 2136: 1965 (P). WDR AK-77-1: 1976.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Records good except those for Dec. 9 to Feb. 1, which are poor.

AVERAGE DISCHARGE.--16 years, 32.9 ft³/s (0.932 m³/s), 93.47 in/yr (2,374 mm/yr), 23,840 acre-ft/yr (29.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s (29.2 m³/s) Sept. 12, 1972, gage height, 5.30 ft (1.615 m), from rating curve extended above 150 ft³/s (4.2 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 5.64 ft (1.719 m) May 4, 1972, backwater from ice; minimum daily discharge, 0.5 ft³/s (0.014 m³/s) Mar. 5-21, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 652 ft³/s (18.5 m³/s) Oct. 5, gage height, 4.35 ft (1.326 m), only peak above base of 480 ft³/s (14 m³/s); minimum daily, 4.5 ft³/s (0.13 m³/s) Jan. 15-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	55	38	8.0	100	16	32	45	64	44	37	17
2	75	34	28	8.0	78	13	40	47	68	46	34	15
3	166	24	22	7.5	47	12	26	42	81	45	69	12
4	133	20	21	7.0	40	12	21	38	105	39	35	11
5	334	17	19	7.5	150	12	19	38	114	47	27	10
6	112	16	16	7.5	80	11	22	57	114	64	24	10
7	50	19	15	7.5	46	11	22	64	99	62	68	10
8	107	23	15	7.5	24	11	21	56	79	61	120	12
9	276	62	13	7.5	22	11	18	56	74	48	88	17
10	95	83	13	7.0	41	11	18	75	78	38	88	14
11	72	236	13	6.5	35	10	48	56	92	136	39	12
12	63	117	12	6.0	24	9.8	63	42	78	188	28	11
13	48	93	12	5.5	19	9.6	39	46	63	88	28	31
14	34	53	11	5.0	17	9.4	24	51	57	60	28	62
15	27	77	11	4.5	15	9.0	19	60	55	48	23	47
16	22	105	10	4.5	14	8.8	17	57	60	43	25	30
17	21	40	10	4.5	13	8.4	15	66	99	47	24	19
18	19	26	13	5.0	12	8.2	15	86	79	41	38	16
19	17	29	11	7.0	12	8.6	15	73	62	37	38	14
20	15	34	10	50	12	9.6	17	65	78	39	25	12
21	14	58	9.5	377	11	8.6	28	54	75	38	24	12
22	14	119	9.0	178	10	8.2	33	45	61	36	36	12
23	17	48	9.0	50	22	8.0	23	46	61	36	25	12
24	105	29	9.0	25	22	7.8	19	51	53	45	20	18
25	74	22	9.0	20	15	7.8	18	53	50	52	18	15
26	33	22	9.0	18	13	8.2	31	62	55	77	17	17
27	24	20	10	16	12	9.2	34	52	55	125	16	50
28	38	68	9.0	15	22	9.2	37	54	54	300	16	23
29	73	171	9.0	14	19	8.8	38	61	45	142	15	20
30	219	63	9.0	14	---	9.6	37	103	44	148	14	148
31	183	---	8.5	30	---	21	---	99	---	54	16	---
TOTAL	2521	1783	413.0	930.5	947	317.8	809	1800	2152	2274	1103	709
MEAN	81.3	59.4	13.3	30.0	32.7	10.3	27.0	58.1	71.7	73.4	35.6	23.6
MAX	334	236	38	377	150	21	63	103	114	300	120	148
MIN	14	16	8.5	4.5	10	7.8	15	38	44	36	14	10
CFSM	17.0	12.4	2.78	6.28	6.84	2.16	5.65	12.2	15.0	15.4	7.45	4.94
IN.	19.62	13.87	3.21	7.24	7.37	2.47	6.29	14.01	16.74	17.69	8.58	5.52
AC-FT	5000	3540	819	1850	1880	630	1600	3570	4270	4510	2190	1410

CAL YR 1979 TOTAL 13699.5 MEAN 37.5 MAX 334 MIN 2.0 CFSM 7.85 IN 106.59 AC-FT 27170
WTR YR 1980 TOTAL 15759.3 MEAN 43.1 MAX 377 MIN 4.5 CFSM 9.02 IN 122.62 AC-FT 31260

15219000 WEST FORK OLSEN BAY CREEK NEAR CORDOVA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)
NOV											
07...	1145	20	23	13.1	8	1	2.7	.3	1.0	.2	9

DATE	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
NOV											
07...	0	3.4	1.4	.25	.030	.16	.19	.44	.000	1	.05

15238795 SELDOVIA RIVER NEAR SELDOVIA

LOCATION.--Lat 59°23'16", long 151°40'31", in NW¼NE¼ sec.20, T.9 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank 0.4 mi (0.6 km) upstream from mouth at head of Seldovia Bay and 3.5 mi (5.6 km) south of Seldovia.

DRAINAGE AREA.--26.2 mi^2 (67.9 km^2).

PERIOD OF RECORD.--October 1978 to March 1980 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map.

REMARKS.--Records good except those above 550 ft^3/s (15.6 m^3/s) and those for the period of no gage-height record, Dec. 8 to Mar. 31, which are poor. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,110 ft^3/s (59.8 m^3/s) Oct. 23, 1978, gage height, 10.70 ft (3.261 m), from rating curve extended above 520 ft^3/s (14.7 m^3/s); minimum daily, 30 ft^3/s (0.85 m^3/s) Jan. 7-16, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October 1979 to March 1980, 1,730 ft^3/s (49.0 m^3/s) Nov. 6, gage height, 10.30 ft (3.139 m), from rating curve extended above 520 ft^3/s (14.7 m^3/s); minimum daily, 30 ft^3/s (0.85 m^3/s) Jan. 7-16.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1979 TO MARCH 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	918	586	316	45	50	40						
2	741	1030	222	40	50	40						
3	619	449	172	40	100	70						
4	777	289	164	35	200	125						
5	833	212	138	35	150	100						
6	603	670	118	35	100	90						
7	413	1350	107	30	90	80						
8	526	1110	100	30	80	70						
9	932	712	90	30	70	70						
10	668	777	80	30	70	60						
11	718	808	80	30	60	60						
12	827	608	70	30	60	55						
13	487	382	70	30	60	55						
14	332	263	60	30	50	50						
15	487	796	60	30	50	50						
16	572	546	60	30	50	50						
17	551	384	50	200	50	45						
18	418	222	50	500	45	45						
19	293	184	50	350	45	45						
20	218	159	45	200	45	40						
21	178	133	45	150	45	40						
22	153	118	45	90	45	40						
23	133	102	45	90	45	60						
24	121	94	40	80	40	80						
25	114	116	40	80	40	100						
26	102	133	40	70	40	150						
27	112	126	80	70	40	100						
28	105	558	100	60	40	150						
29	337	1070	80	60	40	100						
30	1100	521	60	60	---	90						
31	541	---	50	50	---	80						
TOTAL	14929	14448	2727	2640	1850	2230	---	---	---	---	---	---
MEAN	482	482	88.0	85.2	63.8	71.9	---	---	---	---	---	---
MAX	1100	1350	316	500	200	150	---	---	---	---	---	---
MIN	102	94	40	30	40	40	---	---	---	---	---	---
CFSM	18.4	18.4	3.36	3.25	2.44	2.74	---	---	---	---	---	---
IN.	21.20	20.51	3.87	3.75	2.63	3.17	---	---	---	---	---	---
AC-FT	29610	28660	5410	5240	3670	4420	---	---	---	---	---	---

CAL YR 1979 TOTAL 83281 MEAN 228 MAX 1350 MIN 40 CFSM 8.70 IN 118.24 AC-FT 165200

15238820 BARBARA CREEK NEAR SELDOVIA

LOCATION.--Lat 59°28'50", long 151°38'42", in SW¼ sec.15, T.8 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 0.5 mi (0.8 km) upstream from mouth and 3.7 mi (6.0 km) northeast of Seldovia.

DRAINAGE AREA.--20.7 mi^2 (53.6 km^2).

PERIOD OF RECORD.--June 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Records fair except those for Dec. 11 to May 16 and July 17 to Sept. 30, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--8 years, 104 ft^3/s (2.945 m^3/s), 68.23 in/yr (1,733 mm/yr), 75,350 acre-ft/yr (92.9 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 974 ft^3/s (27.6 m^3/s) May 18, 1977, gage height, 4.53 ft (1.381 m), from rating curve extended above 410 ft^3/s (11.6 m^3/s); minimum daily, about 16 ft^3/s (0.45 m^3/s) Feb. 27 to Apr. 3, 1973 and Mar. 18 to Apr. 15, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 616 ft^3/s (17.4 m^3/s) June 6, gage height, 3.77 ft (1.149 m); maximum gage height, 3.83 ft (1.167 m), Nov. 7; minimum daily discharge, about 30 ft^3/s (0.85 m^3/s) Jan. 10-18, Jan. 30 to Feb. 4, and Mar. 19-31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	307	248	32	30	70	35	88	278	233	100	66
2	286	384	204	32	30	60	35	91	295	224	100	61
3	305	293	172	32	30	60	35	94	344	211	200	57
4	363	235	155	32	30	50	35	101	452	210	500	55
5	379	197	133	32	70	50	40	109	490	278	400	55
6	342	322	119	32	70	50	40	113	547	329	300	55
7	292	520	109	32	60	50	40	121	546	277	300	60
8	286	485	100	32	60	40	50	123	466	246	250	150
9	342	412	98	32	60	40	58	132	390	216	250	300
10	325	390	89	30	90	40	50	156	387	221	200	200
11	335	394	80	30	90	40	50	163	388	368	200	150
12	352	362	80	30	80	40	40	161	357	363	200	200
13	312	321	80	30	70	38	40	146	331	305	200	150
14	259	271	70	30	60	35	40	141	316	267	150	150
15	259	381	70	30	60	35	37	138	295	244	150	100
16	277	345	70	30	50	35	36	152	266	216	150	100
17	262	290	60	30	50	35	35	215	251	190	150	100
18	239	245	60	30	50	35	33	279	263	174	150	100
19	210	216	60	40	50	30	33	283	280	167	150	100
20	188	187	50	80	40	30	39	275	358	173	125	150
21	171	165	50	70	40	30	53	265	339	184	121	150
22	158	150	50	60	40	30	55	268	298	182	110	100
23	142	131	50	50	40	30	46	257	285	182	102	100
24	129	116	50	50	40	30	39	322	322	182	96	100
25	118	113	40	40	100	30	38	321	382	173	90	100
26	108	108	40	40	80	30	58	330	361	150	85	200
27	108	109	40	40	80	30	75	334	328	140	80	200
28	100	289	40	40	70	30	72	298	297	130	76	150
29	140	428	40	40	70	30	75	271	259	120	72	100
30	424	315	40	30	---	30	81	307	243	110	71	100
31	331	---	40	30	---	30	---	300	---	100	74	---
TOTAL	7804	8481	2587	1168	1690	1193	1393	6354	10414	6565	5202	3659
MEAN	252	283	83.5	37.7	58.3	38.5	46.4	205	347	212	168	122
MAX	424	520	248	80	100	70	81	334	547	368	500	300
MIN	100	108	40	30	30	30	33	88	243	100	71	55
CFSM	12.2	13.7	4.03	1.82	2.82	1.86	2.24	9.90	16.8	10.2	8.12	5.89
IN.	14.02	15.24	4.65	2.10	3.04	2.14	2.50	11.42	18.71	11.80	9.35	6.58
AC-FT	15480	16820	5130	2320	3350	2370	2760	12600	20660	13020	10320	7260

CAL YR 1979 TOTAL 44585 MEAN 122 MAX 520 MIN 20 CFSM 5.89 IN 80.12 AC-FT 88430
WTR YR 1980 TOTAL 56510 MEAN 154 MAX 547 MIN 30 CFSM 7.44 IN 101.55 AC-FT 112100

NOTE.--No gage-height record Jan. 9 to Apr. 9.

15238990 UPPER BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°42'15", long 150°42'15", Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 1.2 mi (1.9 km) downstream of Nuka Glacier terminus, 2.5 mi (4.0 km) upstream of mouth at Kachemak Creek, 3.5 mi (5.6 km) southeast of Bradley Lake, and 29 mi (47 km) east of Homer.

DRAINAGE AREA.--About 10 mi^2 (26 km^2). Drainage area varies according to position of glacier terminus and will be determined when new aerial photos are analysed.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 1,200 ft (370 m), from topographic map.

REMARKS.--Water-discharge records fair except those above 1,000 ft^3/s (28 m^3/s) and for the period of no gage-height record, Nov. 22 to June 17, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,180 ft^3/s (61.7 m^3/s) Aug. 10, gage height, 7.40 ft (2.256 m), from rating curve extended above 450 ft^3/s (12.7 m^3/s); no flow Dec. 25 to Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	838	109	15	.00	.50	.50	.50	10	100	197	358	343
2	829	105	15	.00	.50	.50	.50	10	110	197	382	257
3	432	63	15	.00	.50	.50	.50	10	120	200	410	178
4	613	49	15	.00	.50	.50	.50	10	140	235	358	152
5	487	40	15	.00	.50	.50	.50	10	160	329	315	147
6	320	74	15	.00	.50	.50	.50	10	190	456	358	109
7	220	134	15	.00	.50	.50	.50	20	220	404	362	116
8	474	172	10	.00	.50	.50	.50	20	210	372	311	169
9	749	152	10	.00	.50	.50	.50	20	200	329	699	273
10	659	161	10	.00	.50	.50	.50	20	190	333	1540	238
11	547	333	10	.00	.50	.50	.50	20	180	534	1670	172
12	320	181	10	.00	.50	.50	.50	30	180	651	1150	181
13	178	94	10	.00	.50	.50	.50	30	170	534	659	393
14	144	64	10	.00	.50	.50	.50	30	160	493	426	432
15	281	91	10	.00	.50	.50	.50	40	160	456	393	487
16	277	70	10	.00	.50	.50	5.0	40	150	393	513	547
17	187	49	5.0	.00	.50	.50	5.0	60	200	358	398	404
18	109	42	5.0	.00	.50	.50	5.0	90	293	315	398	311
19	84	37	5.0	.00	.50	.50	5.0	90	178	281	426	249
20	68	32	5.0	1.0	.50	.50	5.0	90	217	320	311	191
21	60	29	5.0	2.0	.50	.50	5.0	80	181	343	245	172
22	53	25	5.0	1.0	.50	.50	5.0	80	169	367	235	178
23	47	25	5.0	1.0	.50	.50	5.0	80	181	388	245	158
24	44	25	5.0	.50	1.0	.50	5.0	100	245	348	197	178
25	39	20	.00	.50	2.0	.50	5.0	120	426	324	181	178
26	34	20	.00	.50	1.0	.50	5.0	120	432	333	207	841
27	33	20	.00	.50	1.0	.50	5.0	110	398	388	194	750
28	31	20	.00	.50	.50	.50	10	100	307	388	187	400
29	103	20	.00	.50	.50	.50	10	100	242	474	181	300
30	257	15	.00	.50	---	.50	10	100	217	487	161	245
31	123	---	.00	.50	---	.50	---	110	---	382	302	---
TOTAL	8640	2271	235.00	9.00	17.50	15.50	97.50	1760	6326	11609	13772	8749
MEAN	279	75.7	7.58	.29	.60	.50	3.25	56.8	211	374	444	292
MAX	838	333	15	2.0	2.0	.50	10	120	432	651	1670	841
MIN	31	15	.00	.00	.50	.50	.50	10	100	197	161	109
AC-FT	17140	4500	466	18	35	31	193	3490	12550	23030	27320	17350

WTR YR 1980 TOTAL 53501.50 MEAN 146 MAX 1670 MIN .00 AC-FT 106100

15238990 UPPER BRADLEY RIVER NEAR HOMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1980.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1979 to September 1980 (fragmentary).

INSTRUMENTATION.--Temperature recorder since Oct. 1, 1979.

REMARKS.--Missing record due to recorder malfunction, icing at probe, or no discharge. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross section on July 18. A maximum variation of 1.5°C was found within the cross section.

EXTREMES FOR CURRENT YEAR.--Maximum observed, 3.5°C Oct. 14, but may have been higher during periods of missing record in July through September; minimum, 0.0°C on most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	TEMPER- ATURE, WATER (DEG C)
JUL				
18...	1945	49	2.0	1.5
18...	1946	--	10	1.5
18...	1947	--	18	1.5
18...	1948	--	26	2.0
18...	1949	--	34	2.5
18...	1950	--	45	3.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOHER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMHER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.0	.5	1.5	1.0								
2	.5	.5	2.0	.5							---	---
3	1.0	.5	2.0	.5							---	---
4	1.0	1.0	1.5	.5							---	---
5	1.0	1.0	1.0	.5							---	---
6	1.0	1.0	3.0	1.0							---	---
7	2.5	1.0	3.5	2.0							---	---
8	3.0	1.0	3.5	2.5							---	---
9	1.0	1.0	2.5	1.5							---	---
10	1.0	1.0	3.0	2.0							---	---
11	1.0	1.0	3.0	1.0							.0	.0
12	1.0	1.0	2.0	1.0							.0	.0
13	3.0	1.0	1.0	.5							.0	.0
14	3.5	2.0	.0	.0							.0	.0
15	3.0	1.0	.5	.0							.0	.0
16	1.5	.5	.5	.0							.0	.0
17	1.5	1.0	.0	.0							.0	.0
18	2.5	1.0	.0	.0							.0	.0
19	3.0	2.0	.0	.0							.0	.0
20	3.0	.5	.0	.0							.0	.0
21	2.5	.0	.0	.0							.0	.0
22	.5	.5	.0	.0							.0	.0
23	.5	.5	.0	.0							.0	.0
24	.5	.5	.0	.0							.0	.0
25	.5	.5	---	---							.0	.0
26	.5	.5	---	---							.0	.0
27	.5	.5	---	---							.0	.0
28	.5	.5	---	---							.0	.0
29	.5	.5	---	---							.0	.0
30	2.5	1.0	---	---							.0	.0
31	1.5	1.0	---	---							.0	.0
MONTH	3.5	.0	3.5	.0							.0	.0

15238990 UPPER BRADLEY RIVER NEAR HOMER--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.0	.0	.0	.0	.0	.0	---		1.5			
2	.0	.0	.0	.0	.0	.0	---		1.0			
3	.0	.0	.0	.0	.0	.0	---		1.5			
4	.0	.0	.0	.0	.0	.0	---		2.0			
5	.0	.0	.0	.0	.0	.0	---		2.5			
6	.0	.0	.0	.0	.0	.0	---		1.5			
7	.0	.0	.0	.0	.0	.0	---		1.0			
8	.0	.0	.0	.0	.0	.0	---		2.0			
9	.0	.0	.0	.0	.0	.0	---		1.5			
10	.0	.0	.0	.0	.0	.0	---		2.0			
11	.0	.0	.0	.0	.0	.0	---		1.0			
12	.0	.0	.0	.0	.0	.0	---		1.0			
13	.0	.0	.0	.0	.0	.0	---		---			
14	.0	.0	.0	.0	.0	.0	---		1.0			
15	.0	.0	.0	.0	.0	.0	---		1.0			
16	.0	.0	.0	.0	.0	.0	---		.5			
17	.0	.0	.0	.0	.0	.0	---		1.0			
18	.0	.0	.0	.0	.0	.0	1.5		1.0			
19	.0	.0	.0	.0	.0	.0	1.5		1.5			
20	.0	.0	.0	.0	.0	.0	1.0		---			
21	.0	.0	.0	.0	.0	.0	.5		---			
22	.0	.0	.0	.0	.0	.0	.5		---			
23	.0	.0	.0	.0	.0	.0	---		---			
24	.0	.0	.0	.0	.0	.0	.5		---			
25	.0	.0	.0	.0	.0	.0	1.0		---			
26	.0	.0	.0	.0	.0	.0	1.0		---			
27	.0	.0	.0	.0	.0	.0	---		---			
28	.0	.0	.0	.0	.0	.0	.5		---			
29	.0	.0	.0	.0	.0	.0	---		---			
30	.0	.0	.0	.0	---	---	---		---			
31	---	---	.0	.0	---	---	1.0		---			
MONTH	.0	.0	.0	.0	.0	.0						

15239000 BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°45'24", long 150°51'02", in NE¼SW¼ sec.8, T.5 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank about 800 ft (200 m) downstream from Bradley Lake outlet, 3.5 mi (5.6 km) upstream from unnamed tributary, and 26 mi (42 km) northeast of Homer.

DRAINAGE AREA.--54 mi^2 (140 km^2), approximately. Drainage area varies according to position of glacier terminus in headwaters and could be about 4 mi^2 (10 km^2) greater.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to August 1955, October 1957 to current year.

REVISED RECORDS.--WSP 2136: 1960 (M), 1965. AK-77-1: 1958, 1961, 1963 (M), 1966, 1967, 1970, 1972, 1974, 1976.

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (320 m), from topographic map. July 13-22, 1955, nonrecording lake gage at site 1 mi (1.6 km) upstream and July 23 to Aug. 5, 1955, at site 3 mi (4.8 km) upstream at different datums.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Oct. 24 to May 9, which are poor. Streamflow augmented by glaciers, which cover 36 percent of the basin.

AVERAGE DISCHARGE.--23 years, 429 ft^3/s (12.15 m^3/s), 310,800 acre-ft/yr (383 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,020 ft^3/s (170 m^3/s) Aug. 10, 1979, gage height, 9.46 ft (2.883 m); minimum daily, about 16 ft^3/s (0.45 m^3/s) Mar. 26 to Apr. 25, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,470 ft^3/s (98.3 m^3/s) Aug. 11, gage height, 7.64 ft (2.329 m); minimum daily, about 50 ft^3/s (1.4 m^3/s) Jan. 9-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1780	600	140	60	65	90	60	70	586	997	1390	808
2	2420	500	120	55	65	90	60	70	562	921	1320	841
3	2550	500	120	55	65	90	60	70	586	856	1310	781
4	2230	400	120	55	65	90	60	70	638	828	1260	683
5	2200	300	120	55	90	90	60	80	777	919	1180	589
6	1780	400	100	55	80	80	60	90	925	1170	1160	515
7	1340	500	100	55	70	80	60	90	1080	1310	1210	457
8	1290	900	100	52	70	80	58	100	1120	1350	1180	448
9	1840	800	100	50	70	80	55	100	1080	1320	1380	560
10	1960	850	90	50	90	80	55	110	975	1310	2250	657
11	2180	1000	90	50	100	80	55	120	960	1480	3280	638
12	1900	700	90	50	90	80	55	130	937	1850	3240	646
13	1400	500	90	50	80	80	55	150	860	1950	2500	779
14	1040	400	80	50	80	80	55	200	816	1820	1830	999
15	896	600	80	50	80	70	55	250	805	1710	1450	1160
16	1180	450	80	50	75	70	55	284	795	1540	1370	1350
17	1150	350	80	60	75	70	55	321	809	1390	1340	1370
18	971	320	80	60	75	70	55	447	802	1280	1230	1200
19	760	270	70	80	75	70	55	524	808	1190	1240	1020
20	608	250	70	100	70	80	60	534	867	1170	1190	874
21	493	220	70	120	70	70	60	524	896	1220	1060	748
22	410	200	70	110	70	70	60	492	865	1250	930	664
23	356	200	70	100	70	70	60	488	844	1300	852	605
24	320	180	70	90	100	60	60	524	907	1310	770	566
25	280	180	70	90	130	60	60	602	1170	1290	696	555
26	300	160	60	80	100	60	60	638	1380	1270	656	882
27	270	160	60	80	100	60	60	630	1450	1290	651	1920
28	250	160	60	70	90	60	60	614	1410	1360	622	1880
29	500	140	60	70	90	60	60	586	1260	1430	612	1500
30	1000	140	60	70	---	60	70	594	1110	1640	595	1210
31	700	---	60	65	---	70	---	606	---	1560	662	---
TOTAL	36362	12330	2630	2087	2350	2300	1753	10108	28080	41281	40416	26905
MEAN	1173	411	84.8	67.3	81.0	74.2	58.4	326	936	1332	1304	897
MAX	2550	1000	140	120	130	90	70	638	1450	1950	3280	1920
MIN	250	140	60	50	65	60	55	70	562	828	595	448
AC-FT	72120	24460	5220	4140	4660	4560	3480	20050	55700	81880	80170	53370

CAL YR 1979 TOTAL 215764 MEAN 591 MAX 5210 MIN 26 AC-FT 428000
WTR YR 1980 TOTAL 206602 MEAN 564 MAX 3280 MIN 50 AC-FT 409800

15239000 BRADLEY RIVER NEAR HOMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1968, 1970-73, and 1979 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1979 to current year.

INSTRUMENTATION.--Temperature recorder since Oct. 23, 1979.

REMARKS.--Missing record due to recorder malfunction. Temperature at the sensor was compared with the average for the river by temperature cross sections July 17 and Aug. 19. A maximum variation of 1.5°C was found within the cross sections.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 9.0°C Aug. 23; minimum, 0.0°C most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	PER-CENT OF TOTAL DEPTH	TEMPER-ATURE, WATER (DEG C)
JUL					
17...	0946	112	--	20	5.1
17...	0947	112	--	80	4.8
17...	0948	134	--	20	5.0
17...	0949	134	--	80	4.8
17...	0950	148	--	20	5.8
17...	0951	148	--	80	5.0
17...	0952	161	--	20	5.6
17...	0953	161	--	80	5.0
17...	0954	173	--	20	6.3
17...	0955	173	--	80	5.0
17...	0956	180	--	--	5.4
AUG					
19...	1400	118	16.0	20	5.6
19...	1401	118	16.0	80	5.5
19...	1402	135	20.0	20	5.5
19...	1403	135	20.0	80	5.5
19...	1404	149	18.0	20	5.6
19...	1405	149	18.0	80	5.5
19...	1406	161	18.0	20	5.6
19...	1407	161	18.0	80	5.5
19...	1408	171	14.0	20	5.7
19...	1409	171	14.0	80	5.7

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT								
23...	1500	347	5.0	132	124	76	91	95
JAN								
08...	1400	52	.5	29	4.1	--	--	--
MAR								
11...	1300	79	.0	26	5.5	--	--	--
APR								
08...	1500	58	.5	9	1.4	--	--	--
JUN								
11...	1030	975	1.5	54	142	--	--	--
AUG								
19...	1359	1250	--	100	337	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT							
23...	97	96	96	97	98	99	100
JAN							
08...	--	--	--	--	--	--	--
MAR							
11...	--	--	--	--	--	--	--
APR							
08...	--	--	--	--	--	--	--
JUN							
11...	--	--	--	--	--	--	--
AUG							
19...	--	--	--	--	--	--	--

15239000 BRADLEY RIVER NEAR HOMER--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	5.0	5.0					---	---	.0	.0
2	---	---	5.0	5.0					---	---	.0	.0
3	---	---	5.0	5.0					---	---	.0	.0
4	---	---	5.0	4.5					---	---	.0	.0
5	---	---	4.5	4.5					---	---	.0	.0
6	---	---	4.5	4.5					---	---	.0	.0
7	---	---	4.5	4.5					---	---	.0	.0
8	---	---	4.5	4.5					---	---	.0	.0
9	---	---	4.5	4.5					---	---	.0	.0
10	---	---	4.5	4.5					---	---	.0	.0
11	---	---	4.5	4.5					.0	.0	.0	.0
12	---	---	4.5	4.5					.0	.0	.0	.0
13	---	---	4.5	4.5					.0	.0	.0	.0
14	---	---	4.5	4.5					.0	.0	.0	.0
15	---	---	4.5	4.0					.0	.0	.0	.0
16	---	---	4.0	4.0					.0	.0	.0	.0
17	---	---	4.0	4.0					.0	.0	.0	.0
18	---	---	4.0	4.0					.0	.0	.0	.0
19	---	---	4.0	4.0					.0	.0	.0	.0
20	---	---	4.0	3.5					.0	.0	.0	.0
21	---	---	3.5	3.5					.0	.0	.0	.0
22	---	---	3.5	3.5					.0	.0	.0	.0
23	5.0	5.0	---	---					.0	.0	.0	.0
24	5.0	5.0	---	---					.0	.0	.0	.0
25	5.0	5.0	---	---					.0	.0	.0	.0
26	5.0	5.0	---	---					.0	.0	.0	.0
27	5.0	5.0	---	---					.0	.0	---	---
28	5.0	5.0	---	---					.0	.0	---	---
29	5.0	5.0	---	---					.0	.0	---	---
30	5.0	5.0	---	---					---	---	---	---
31	5.0	5.0	---	---					---	---	---	---
MONTH	5.0	5.0	5.0						.0	.0	.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---			---	---	3.0	3.0	6.0	5.5	7.0	7.0
2	---	---			---	---	3.0	3.0	5.5	5.5	7.0	7.0
3	---	---			---	---	3.0	3.0	5.5	5.5	7.0	7.0
4	---	---			---	---	3.0	3.0	5.5	5.5	7.0	6.5
5	---	---			---	---	3.5	3.0	8.0	5.5	6.5	6.5
6	---	---			---	---	3.5	3.5	8.0	7.5	6.5	6.5
7	---	---			---	---	6.0	3.5	7.5	7.0	6.5	6.5
8	.5	.0			---	---	5.0	5.0	7.0	7.0	6.5	6.5
9	.0	.0			---	---	6.0	5.0	7.0	7.0	6.5	6.5
10	.0	.0			---	---	5.5	5.0	7.0	7.0	6.5	6.5
11	.0	.0			1.5	1.5	5.0	5.0	7.0	6.5	6.5	6.5
12	.0	.0			1.5	1.5	5.0	5.0	6.5	5.5	6.5	6.5
13	.0	.0			1.5	1.5	5.0	5.0	5.5	5.5	6.5	6.5
14	.0	.0			1.5	1.5	5.0	5.0	5.5	5.5	6.5	6.5
15	.0	.0			1.5	1.5	5.5	5.0	5.5	5.5	6.5	6.5
16	.0	.0			1.5	1.5	6.0	5.5	5.5	5.5	6.5	6.5
17	.0	.0			1.5	1.5	6.0	6.0	5.5	5.5	6.5	6.5
18	.0	.0			1.5	1.5	8.0	6.0	5.5	5.5	6.5	6.5
19	.0	.0			1.5	1.5	7.5	6.0	6.0	5.5	6.5	6.5
20	.0	.0			2.0	1.5	8.0	6.0	6.0	6.0	6.5	6.5
21	.0	.0			2.0	2.0	8.0	7.5	6.5	6.0	6.5	6.5
22	.0	.0			2.0	2.0	8.0	6.0	6.5	6.5	6.5	6.5
23	.0	.0			2.0	2.0	7.0	6.0	9.0	6.5	6.5	6.5
24	.0	.0			2.0	2.0	6.5	6.0	8.0	8.0	6.5	6.5
25	.0	.0			2.5	2.0	6.5	6.5	8.0	7.5	6.5	6.5
26	.0	.0			2.5	2.5	7.0	6.5	7.5	7.5	6.5	6.5
27	.0	.0			2.5	2.5	7.0	6.5	7.5	7.5	6.5	6.5
28	.0	.0			3.0	2.5	6.5	6.0	7.5	7.5	6.5	6.5
29	.0	.0			3.0	3.0	6.0	6.0	7.5	7.0	6.5	6.5
30	---	---			3.0	3.0	6.0	6.0	7.0	7.0	6.5	6.5
31	---	---			---	---	6.0	6.0	7.0	7.0	---	---
MONTH	.5	.0			3.0		8.0	3.0	9.0	5.5	7.0	6.5
YEAR	9.0	.0										

15239050 BRADLEY RIVER TRIBUTARY NEAR HOMER

LOCATION.--Lat 59°46'42", long 150°45'15", in NW¼NE¼ sec.2, T.5 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 6.0 mi (9.6 km) upstream from mouth and 27 mi (43 km) east of Homer.

DRAINAGE AREA.--9.25 mi² (23.97 km²).

PERIOD OF RECORD.--October 1979 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 2,300 ft (700 m), from topographic map.

REMARKS.--Records good except those for Nov. 18 to June 15 and July 19 to Aug. 18, which are poor. Several observations of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge not determined; minimum daily, about 4.0 ft³/s (0.11 m³/s) Feb. 15 to Apr. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	32	15	6.0	5.0	4.0	4.0	5.0	40	100	184	138
2	273	33	15	6.0	5.0	4.0	4.0	5.0	40	100	170	105
3	167	35	10	6.0	5.0	4.0	4.0	5.0	40	98	190	86
4	180	32	10	6.0	5.0	4.0	4.0	5.0	50	102	138	70
5	156	24	10	6.0	5.0	4.0	4.0	5.0	50	144	127	60
6	107	24	10	6.0	5.0	4.0	4.0	5.0	60	227	140	55
7	84	60	10	6.0	5.0	4.0	4.0	5.0	70	184	150	52
8	112	72	10	6.0	5.0	4.0	4.0	10	80	163	130	53
9	232	57	9.0	6.0	5.0	4.0	4.0	10	90	147	200	78
10	156	56	9.0	6.0	5.0	4.0	4.0	10	80	144	500	75
11	170	72	9.0	6.0	5.0	4.0	4.0	10	81	315	600	59
12	114	57	9.0	6.0	5.0	4.0	4.0	10	70	481	400	57
13	88	44	9.0	5.0	5.0	4.0	4.0	10	70	284	300	130
14	75	63	9.0	5.0	5.0	4.0	4.0	10	60	273	180	245
15	80	56	8.0	5.0	4.0	4.0	4.0	10	60	264	170	264
16	102	35	8.0	5.0	4.0	4.0	4.0	10	62	187	180	245
17	78	32	8.0	5.0	4.0	4.0	4.0	10	65	187	156	163
18	63	30	8.0	5.0	4.0	4.0	4.0	10	68	191	170	127
19	53	25	8.0	5.0	4.0	4.0	4.0	10	75	190	191	105
20	45	25	7.0	5.0	4.0	4.0	4.0	10	82	191	163	86
21	42	20	7.0	5.0	4.0	4.0	4.0	20	80	191	136	84
22	38	20	7.0	5.0	4.0	4.0	4.0	20	78	200	110	90
23	35	20	7.0	5.0	4.0	4.0	4.0	20	84	219	107	77
24	32	20	7.0	5.0	4.0	4.0	4.0	20	105	200	98	70
25	30	15	7.0	5.0	4.0	4.0	5.0	20	177	180	94	68
26	32	15	7.0	5.0	4.0	4.0	5.0	20	187	210	92	259
27	27	15	7.0	5.0	4.0	4.0	5.0	30	163	250	92	236
28	24	15	6.0	5.0	4.0	4.0	5.0	30	147	250	96	130
29	22	15	6.0	5.0	4.0	4.0	5.0	30	119	280	96	100
30	59	15	6.0	5.0	---	4.0	5.0	30	102	300	88	86
31	48	---	6.0	5.0	---	4.0	---	30	---	199	130	---
TOTAL	3045	1034	264.0	167.0	130.0	124.0	126.0	435.0	2535	6451	5578	3453
MEAN	98.2	34.5	8.52	5.39	4.48	4.00	4.20	14.0	84.5	208	180	115
MAX	321	72	15	6.0	5.0	4.0	5.0	30	187	481	600	264
MIN	22	15	6.0	5.0	4.0	4.0	4.0	5.0	40	98	88	52
CFSM	10.6	3.73	.92	.58	.48	.43	.45	1.51	9.14	22.5	19.5	12.4
IN.	12.24	4.16	1.06	.67	.52	.50	.51	1.75	10.19	25.94	22.43	13.89
AC-FT	6040	2050	524	331	258	246	250	863	5030	12800	11060	6850

WTR YR 1980 TOTAL 23342.0 MEAN 63.8 MAX 600 MIN 4.0 CFSM 6.90 IN 93.86 AC-FT 46300

NOTE.--No gage height record Dec. 2 to June 15 and most days July 19 to Aug. 18.

15239900 ANCHOR RIVER NEAR ANCHOR POINT

LOCATION.--Lat 59°44'50", long 151°45'11", in NE¼ sec.13, T.5 S., r.15 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank at downstream side of bridge on Sterling Highway, and 3.3 mi (5.3 km) southeast of Anchor Point.

DRAINAGE AREA.--137 mi^2 (355 km^2).

PERIOD OF RECORD.--June 1964 to September 1973 and annual maximum, water year 1974. September 1978 to current year.

REVISED RECORDS.--WSP 2136: 1965 (M). WDR AK-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 168.64 ft (51.401 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those above 1,000 ft^3/s (28 m^3/s, which are fair and those for Dec. 14 to Apr. 15, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--10 years, 201 ft^3/s (5.692 m^3/s), 19.92 in/yr (506 mm/yr), 145,600 acre-ft/yr (180 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,240 ft^3/s (63.4 m^3/s) May 15, 1973, gage height, 5.91 ft (1.801 m), from rating curve extended above 950 ft^3/s (27 m^3/s) on basis of slope-area and contracted-opening measurement at gage height 5.38 ft (1.640 m) and slope-area measurement of peak flow; maximum gage height, 10.86 ft (3.310 m) Dec. 3, 1978, backwater from ice; minimum daily discharge, about 28 ft^3/s (0.79 m^3/s) Jan. 1-31, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (23 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 16	2000	806	22.8	4.03	1.228	May 12	0600	1,180	33.4	4.40	1.341
Nov. 8	1100	*2,220	62.9	*5.89	1.795	May 19	0300	1,740	49.3	5.14	1.567
Nov. 11	1200	2,090	59.2	5.72	1.743	May 31	0600	1,610	45.6	4.98	1.518
Nov. 16	0400	1,180	33.4	4.55	1.387	July 11	2030	1,170	33.1	4.39	1.338
Nov. 29	1800	1,420	40.2	4.87	1.484						

Minimum daily discharge, about 95 ft^3/s (2.7 m^3/s) Jan. 10-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	343	526	100	100	150	230	844	1290	366	211	154
2	415	482	394	100	100	150	230	844	1240	263	190	120
3	399	424	328	100	100	150	250	933	1320	256	266	113
4	302	291	313	100	100	150	250	954	1320	224	199	111
5	343	230	277	100	120	150	250	969	1200	205	162	106
6	464	256	298	100	120	145	270	844	1190	291	148	102
7	298	1280	328	100	100	145	270	858	1020	328	146	104
8	240	1980	274	100	100	140	270	806	812	240	165	113
9	478	1070	214	96	120	140	270	1070	683	211	196	118
10	370	1300	218	95	150	140	270	1030	593	224	211	111
11	284	1960	184	95	200	130	270	1020	593	878	274	104
12	274	1320	162	95	170	130	250	1080	526	840	221	160
13	253	818	138	95	140	130	250	818	468	464	190	694
14	211	556	130	95	140	130	250	774	441	331	156	446
15	193	712	120	95	130	130	250	905	374	324	156	305
16	556	892	120	95	130	120	237	933	343	266	424	240
17	551	478	120	95	120	120	221	1200	351	320	305	196
18	343	358	110	110	120	120	218	1590	316	280	237	170
19	263	324	110	150	110	120	221	1540	277	233	218	154
20	221	313	110	200	110	130	270	1380	459	202	182	143
21	196	266	110	170	110	130	382	1290	445	199	170	162
22	184	270	110	150	110	130	424	1300	403	167	173	284
23	176	243	110	140	110	130	351	1250	313	154	154	227
24	165	190	110	130	130	140	284	1170	270	148	138	190
25	159	211	110	120	180	140	298	1250	539	146	128	202
26	151	237	110	110	170	140	407	1250	433	143	120	247
27	148	199	110	100	160	180	561	1160	331	138	118	533
28	154	382	100	100	150	180	604	1230	263	151	118	298
29	187	1250	100	100	150	180	609	1150	246	214	118	237
30	455	940	100	100	---	200	689	1380	288	449	116	214
31	497	---	100	100	---	200	---	1510	---	256	143	---
TOTAL	9380	19575	5644	3436	3750	4470	9606	34332	18347	8911	5753	6358
MEAN	303	653	182	111	129	144	320	1107	612	287	186	212
MAX	556	1980	526	200	200	200	689	1590	1320	878	424	694
MIN	148	190	100	95	100	120	218	774	246	138	116	102
CFSM	2.21	4.77	1.33	.81	.94	1.05	2.34	8.08	4.47	2.10	1.36	1.55
IN.	2.55	5.32	1.53	.93	1.02	1.21	2.61	9.32	4.98	2.42	1.56	1.73
AC-FT	18610	38830	11190	6820	7440	8870	19050	68100	36390	17670	11410	12610

CAL YR 1979 TOTAL 83568 MEAN 229 MAX 1980 MIN 56 CFSM 1.67 IN 22.69 AC-FT 165800
WTR YR 1980 TOTAL 129562 MEAN 354 MAX 1980 MIN 95 CFSM 2.58 IN 35.18 AC-FT 257000

15241600 NINILCHIK RIVER AT NINILCHIK

LOCATION.--Lat 60°02'56", long 151°39'48", in NE¼ sec.34, T.1 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on downstream side of bridge at Ninilchik and 0.9 mi (1.4 km) upstream from mouth.

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--April 1963 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 30 ft (9 m), from topographic map. Prior to Oct. 1, 1965, at site 0.2 mi (0.3 km) upstream at different datum.

REMARKS.--Records fair except those for Nov. 25 to Apr. 23, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years, 107 ft³/s (3.030 m³/s), 11.09 in/yr (282 mm/yr), 77,520 acre-ft/yr (95.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,240 ft³/s (35.1 m³/s) Apr. 24, 1974, gage height, 6.04 ft (1.841 m), from graph based on gage readings; maximum gage height observed, 8.69 ft (2.649 m) Apr. 14, 1969, backwater from ice; minimum discharge observed, 30 ft³/s (0.85 m³/s) July 20, 1966, gage height, 3.64 ft (1.109 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 841 ft³/s (23.8 m³/s) Nov. 8, gage height, 6.14 ft (1.871 m); minimum observed, 66 ft³/s (1.9 m³/s) July 26 and 28, gage height, 4.15 ft (1.265 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	197	170	85	90	90	110	404	378	204	126	113
2	115	184	150	80	90	90	110	367	310	160	100	86
3	113	182	130	80	90	88	110	343	237	129	196	79
4	101	150	110	80	90	85	120	338	233	120	156	75
5	95	129	100	80	100	85	120	310	200	115	107	71
6	91	141	110	80	100	85	120	265	196	153	93	75
7	82	434	110	80	100	85	130	256	178	160	144	73
8	77	841	120	80	100	85	130	220	132	141	147	79
9	177	761	110	80	90	85	130	204	113	135	147	95
10	155	756	100	82	90	85	130	200	110	153	144	88
11	121	640	100	80	90	85	150	208	115	310	144	82
12	121	741	100	80	90	85	150	196	115	410	138	84
13	115	560	90	80	90	85	150	184	126	372	126	174
14	103	338	90	80	90	85	150	174	135	265	102	300
15	182	303	90	80	90	85	150	160	123	216	110	256
16	205	458	90	80	90	90	175	153	107	150	167	212
17	208	338	90	90	90	90	175	178	95	132	170	178
18	213	237	90	90	90	90	175	188	93	120	150	144
19	182	279	85	100	90	90	200	184	86	102	132	120
20	129	205	85	100	90	90	200	184	138	90	107	129
21	105	179	85	100	90	90	200	178	167	79	95	141
22	103	169	85	90	90	90	250	174	160	77	88	129
23	101	162	85	90	90	90	250	192	135	73	84	132
24	101	153	85	90	90	90	265	181	115	69	86	129
25	99	140	85	90	90	90	295	181	196	67	79	120
26	95	130	85	90	90	90	361	174	170	66	73	118
27	103	120	85	90	90	100	404	216	153	67	71	178
28	119	115	85	90	90	100	442	300	129	66	73	170
29	129	200	85	90	90	100	456	305	129	129	77	150
30	182	185	85	90	---	100	423	349	141	178	79	174
31	215	---	85	90	---	100	---	430	---	167	123	---
TOTAL	4056	9427	3055	2667	2650	2778	6231	7396	4715	4675	3634	3954
MEAN	131	314	98.5	86.0	91.4	89.6	208	239	157	151	117	132
MAX	215	841	170	100	100	100	456	430	378	410	196	300
MIN	77	115	85	80	90	85	110	153	86	66	71	71
CFSM	1.00	2.40	.75	.66	.70	.68	1.59	1.82	1.20	1.15	.89	1.01
IN.	1.15	2.68	.87	.76	.75	.79	1.77	2.10	1.34	1.33	1.03	1.12
AC-FT	8050	18700	6060	5290	5260	5510	12360	14670	9350	9270	7210	7840

CAL YR 1979 TOTAL 44814 MEAN 123 MAX 841 MIN 44 CFSM .94 IN 12.73 AC-FT 88890
WTR YR 1980 TOTAL 55238 MEAN 151 MAX 841 MIN 66 CFSM 1.15 IN 15.69 AC-FT 109600

NOTE.--No gage-height record Dec. 13 to Apr. 1.

15258000 KENAI RIVER AT COOPER LANDING

LOCATION.--Lat 60°29'34", long 149°48'28", in SE¼ sec.28, T.5 N., R.3 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, near center of span on upstream side of bridge on Sterling Highway, 0.9 mi (1.4 km) east (upstream) of Cooper Landing, Bean Creek, and Kenai Lake outlet.
DRAINAGE AREA.--634 mi² (1,642 km²).
PERIOD OF RECORD.--May 1947 to current year.
REVISED RECORDS.--WSP 2136: 1964 (M).
GAGE.--Nonrecording gage. Altitude of gage is 419.92 ft (127.992 m) National Geodetic Vertical Datum of 1929, (levels by Alaska Department of Transportation). See WSP 2136 for history of changes prior to Aug. 28, 1965. Aug. 28, 1965 to Jan. 21, 1974 at site 30 ft (9 m) downstream at present datum.
REMARKS.--Records good. Diversion from Cooper Lake to Kenai Lake above gage through Cooper Lake powerplant began May 1961.
COOPERATION.--Records of diversion furnished by Chugach Electric Association.
AVERAGE DISCHARGE.--33 years, 2,791 ft³/s (79.04 m³/s), 59.78 in/yr (1,518 mm/yr), 2,022,000 acre-ft/yr (2.49 km³/yr), adjusted to exclude diversion from Cooper Lake.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,100 ft³/s (654 m³/s) Sept. 21, 1974, gage height, 17.18 ft (5.236 m), result of release of stored water from glacier-dammed lake at head of unnamed glacier in the Snow River basin; no flow Mar. 27, 28, 1964, caused by earthquake.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,900 ft³/s (365 m³/s) July 15, gage height, 13.67 ft (4.167 m); minimum daily, 670 ft³/s (19.0 m³/s) Mar. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7340	5640	3860	1260	1540	1320	760	1520	4560	9180	10900	4670
2	9220	5140	3860	1240	1540	1300	750	1600	4590	8850	10600	4640
3	10600	5090	3790	1220	1520	1210	740	1710	4640	8650	10300	4560
4	11100	4560	3580	1210	1520	1170	765	1760	4820	8340	9920	4400
5	11200	4110	3440	1200	1700	1160	800	1820	5140	8190	9510	4160
6	11300	4110	3300	1160	1810	1150	815	1920	6140	7360	9220	4050
7	10400	3820	3100	1090	1790	1120	835	2050	7000	8980	9090	3860
8	9750	3540	2900	1060	1810	1080	876	2160	7830	9680	9040	3780
9	9370	3500	2760	1030	1790	1030	894	2220	8340	10200	8980	3930
10	9780	3430	2510	1020	1800	1000	924	2420	8600	10300	9630	4000
11	9540	3440	2450	1010	1820	960	966	2540	8580	10400	10400	4050
12	9680	3720	2300	948	1910	936	1020	2680	8600	10900	10500	3900
13	9290	3820	2150	930	1890	894	1080	2750	8450	11900	10400	3960
14	8630	3790	2080	924	1880	864	1120	2760	8160	12600	9940	3930
15	8050	3820	2010	948	1880	858	1140	2780	7970	12900	9330	4060
16	7790	3900	1890	942	1830	835	1200	2800	7770	12600	8780	4300
17	7970	3890	1840	948	1820	825	1170	2930	7640	12100	8560	4620
18	7790	3790	1810	1090	1760	795	1160	3180	7790	11600	8230	4720
19	7620	3610	1740	1260	1710	785	1150	3580	7720	11100	7790	4560
20	8490	3650	1690	1200	1640	770	1160	3990	7750	10600	7360	4610
21	9540	3500	1620	1240	1590	770	1100	4300	7620	10600	6960	4500
22	10500	3370	1600	1520	1560	760	1230	4420	7430	10600	6680	4190
23	12000	3440	1520	1600	1520	750	1260	4460	7260	10600	6380	4030
24	12200	3180	1480	1660	1560	740	1250	4540	7320	10800	6040	3870
25	10400	3060	1440	1670	1520	720	1250	4420	7360	10900	5660	3780
26	8710	2760	1440	1660	1460	695	1260	4620	7680	10800	5410	3640
27	7360	2600	1440	1660	1440	685	1290	4500	8300	10800	5180	3890
28	6240	2540	1440	1650	1420	670	1320	4510	8760	10700	5000	4290
29	5030	2940	1400	1610	1380	680	1390	4510	9180	10700	4830	4540
30	5140	3620	1370	1590	---	685	1450	4580	9290	10900	4720	4800
31	5590	---	1310	1560	---	690	---	4540	---	11100	4590	---
TOTAL	277620	111380	69120	39110	48410	27907	32125	98570	222290	324930	249930	126290
MEAN	8955	3713	2230	1262	1669	900	1071	3180	7410	10480	8062	4210
MAX	12200	5640	3860	1670	1910	1320	1450	4620	9290	12900	10900	4800
MIN	5030	2540	1310	924	1380	670	740	1520	4560	7360	4590	3640
AC-FT	550700	220900	137100	77570	96020	55350	63720	195500	440900	644500	495700	250500

CAL YR 1979 TOTAL 1365807 MEAN 3742 MAX 12200 MIN 350 AC-FT 2709000
WTR YR 1980 TOTAL 1627682 MEAN 4447 MAX 12900 MIN 670 AC-FT 3229000

ADJUSTED TO EXCLUDE DIVERSION FROM COOPER LAKE

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8,898	3,619	2,061	1,045	1,471	830	914	3,129	7,294	10,241	7,794	4,035
CFSM	14.03	5.71	3.25	1.65	2.32	1.31	1.44	4.94	11.50	16.15	12.30	6.36
IN	16.18	6.37	3.75	1.90	2.50	1.51	1.61	5.69	12.84	18.62	14.18	7.10
AC-FT	547,100	215,300	126,700	64,240	84,590	51,050	54,360	192,400	434,000	629,700	479,200	240,100

CAL YR 1979 MEAN 3,671 CFSM 5.79 IN 78.59 AC-FT 2,657,000
WTR YR 1980 MEAN 4,296 CFSM 6.78 IN 92.24 AC-FT 3,119,000

15266300 KENAI RIVER AT SOLDOTNA

LOCATION.--Lat 60°28'39", long 151°04'46", Kenai Peninsula Borough, Hydrologic Unit 19050002, near center of span on downstream side of bridge on Sterling Highway, 1.0 mi (1.6 km) southwest of Soldotna.

DRAINAGE AREA.--2,010 mi² (5,210 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Nonrecording gage. Datum of gage is 35.34 ft (10.772 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for Dec. 12 to Feb. 29, which are poor.

AVERAGE DISCHARGE.--15 years, 5,820 ft³/s (164.8 m³/s), 39.32 in/yr (999 mm/yr), 4,217,000 acre-ft/yr (5.20 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,700 ft³/s (954 m³/s) Sept. 9, 1977, gage height, 13.45 ft (4.100 m), from graph based on gage readings; maximum gage height, 22.62 ft (6.895 m) Jan. 18, 1969, backwater from ice; minimum daily discharge, 770 ft³/s (21.8 m³/s) Apr. 1-4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,300 ft³/s (575 m³/s) July 16 and 17, gage height, 11.10 ft (3.383 m); minimum daily, 1,720 ft³/s (48.7 m³/s) Mar. 28 and 29, gage height, 5.65 ft (1.722 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14100	9700	6550	3500	4000	2800	2070	2840	10700	14100	19300	10500
2	15100	9580	6640	3500	4000	2700	2280	2840	11100	14300	19000	10300
3	15600	8980	6550	3500	4000	2640	2440	2900	11700	14300	19000	9900
4	15600	8580	6550	3500	4000	2560	2800	2900	12200	14100	19000	9500
5	16600	8020	6460	3250	4000	2480	2960	2960	12700	14000	18700	9220
6	16600	7750	6100	3250	4000	2400	2960	3000	12800	14400	18200	8820
7	16100	7960	5890	3250	4000	2400	3160	3160	12800	15200	18000	8500
8	15600	8050	5800	3250	4500	2400	3040	3160	10700	15400	18000	8260
9	15800	7900	5560	3250	4500	2310	3080	3250	11100	15800	17600	8260
10	15600	7900	5350	3250	4500	2280	3080	3450	11700	16000	18600	8080
11	15600	8350	5350	3250	4500	2250	3200	3550	12200	16200	19300	7900
12	16200	8440	5000	3250	4500	2250	3300	3600	12700	17600	19600	7660
13	15600	8350	5000	3250	4500	2250	3350	3850	12800	19400	19600	7840
14	14900	7900	5000	3000	4500	2250	3100	3900	12800	20000	19600	8260
15	14700	7450	4500	3000	4000	2180	2840	3950	12700	19800	19600	9100
16	14100	7600	4500	3000	4000	2310	2880	4150	12700	20300	19300	9980
17	14300	7150	4500	3000	4000	2370	2800	4320	12700	20300	19300	10300
18	13700	6880	4500	3000	3500	2020	2760	4620	12700	20000	18800	10000
19	13200	6760	4500	3000	3500	1890	2700	5000	12700	19800	18000	9900
20	12700	6550	4000	3000	3500	1860	2680	5260	12800	19600	17600	9700
21	12300	6640	4000	3000	3500	1860	2800	5500	13000	19600	16700	9620
22	12200	6580	4000	3000	3500	1830	2800	5800	12800	19300	15800	9620
23	12400	6580	4000	3000	3000	1830	2800	6010	12700	19300	14700	9380
24	12900	5950	4000	3000	3000	1800	2720	6310	12500	19000	14400	9180
25	13100	5620	3750	3500	3000	1830	2680	6460	12900	19000	13500	8780
26	12900	5560	3750	3500	3000	1770	2680	6610	13600	19000	12900	8580
27	12500	5260	3750	3500	3000	1780	2720	6880	13700	19000	12300	9700
28	11900	5350	3750	3500	3000	1720	2800	7000	13800	19000	11900	10000
29	11100	6100	3750	3500	2840	1720	2800	7150	13900	18800	11500	9860
30	10500	6550	3500	3500	---	1920	2800	7360	13900	19300	10900	9860
31	10100	---	3500	3500	---	1770	---	7360	---	19300	10600	---
TOTAL	433600	220040	150050	100750	109840	66430	85080	145100	377100	551200	521300	276560
MEAN	13990	7335	4840	3250	3788	2143	2836	4681	12570	17780	16820	9219
MAX	16600	9700	6640	3500	4500	2800	3350	7360	13900	20300	19600	10500
MIN	10100	5260	3500	3000	2840	1720	2070	2840	10700	14000	10600	7660
CFSM	6.96	3.65	2.41	1.62	1.89	1.07	1.41	2.33	6.25	8.85	8.37	4.59
IN.	8.02	4.07	2.78	1.86	2.03	1.23	1.57	2.69	6.98	10.20	9.65	5.12
AC-FT	860000	436400	297600	199800	217900	131800	168800	287800	748000	1093000	1034000	548600

CAL YR 1979 TOTAL 2627695 MEAN 7199 MAX 26800 MIN 800 CFSM 3.58 IN 48.63 AC-FT 5212000
WTR YR 1980 TOTAL 3037050 MEAN 8298 MAX 20300 MIN 1720 CFSM 4.13 IN 56.21 AC-FT 6024000

NOTE.--No gage-height record Jan. 3 to Feb. 23.

15266300 KENAI RIVER AT SOLDOTNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952-53, 1955-58, 1966-71, 1977, and 1979-80.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: August to December 1979 (discontinued).

REMARKS.--Once-daily samples were collected by observer.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 52 mg/L Oct. 2, 1979; minimum daily mean, 1 mg/L Sept. 7, 9, and Oct. 23, 1979.
SEDIMENT LOADS: Maximum daily, 2,120 tons (1,920 tonnes) Oct. 2, 1970; minimum daily, 23 tons (21 tonnes) Sept. 9, 1979.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD:
SEDIMENT CONCENTRATIONS: Maximum observed, 151 mg/L July 14, 1971; minimum observed, 1 mg/L Mar. 24, 1971.
SEDIMENT LOADS: Maximum daily observed, 9,290 tons (8,430 tonnes) Sept. 9, 1977; minimum daily observed, 3.1 tons (2.8 tonnes) Mar. 24, 1971.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	PER-CENT OF TOTAL DEPTH	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV								
14...	1400	--	--	--	8010	3.0	10	216
14...	1530	--	--	--	8010	3.0	10	216
MAR								
13...	1645	--	--	--	2290	.0	10	62
MAY								
09...	1500	--	--	--	3280	--	16	142
JUN								
12...	0900	--	--	--	12500	--	48	1620
JUL								
29...	1330	263	117	20	18400	11.8	33	1640
29...	1331	--	117	80	--	11.8	--	--
29...	1332	--	149	20	--	11.8	--	--
29...	1333	--	149	80	--	11.8	--	--
29...	1334	--	181	20	--	11.8	--	--
29...	1335	--	181	80	--	11.8	--	--
29...	1336	--	218	20	--	11.8	--	--
29...	1337	--	218	80	--	11.8	--	--
29...	1338	--	270	20	--	11.8	--	--
29...	1339	--	270	80	--	11.8	--	--
SEP								
30...	0800	--	--	--	7660	7.5	15	310

15266300 KENAI RIVER AT SOLDOTNA--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), AUGUST TO DECEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		AUGUST			SEPTEMBER	
1	15800	---	---	12900	8	279
2	15200	---	---	12200	8	264
3	15100	---	---	11500	7	217
4	14900	---	---	10900	5	147
5	14700	---	---	10300	5	139
6	14600	---	---	9700	4	105
7	14500	---	---	9140	1	25
8	14800	---	---	8700	2	47
9	14800	---	---	8350	1	23
10	16000	---	---	8140	4	88
11	18800	---	---	8020	2	43
12	20800	---	---	7960	4	86
13	22300	---	---	8140	8	176
14	23000	---	---	8500	13	298
15	24700	---	---	9900	28	748
16	25000	---	---	10900	18	530
17	26500	---	---	11700	12	379
18	26800	---	---	12300	10	332
19	26500	---	---	13000	11	386
20	25700	---	---	13700	9	333
21	24100	---	---	14500	12	470
22	22900	---	---	14800	14	559
23	21600	21	1220	15600	20	842
24	20400	17	936	15900	16	687
25	19200	12	622	15900	12	515
26	18000	10	486	15900	14	601
27	17000	10	459	15500	11	460
28	16100	10	435	15300	12	496
29	15100	12	489	14700	9	357
30	14400	14	544	13900	7	263
31	13600	8	294	---	---	---
TOTAL	592900	---		357950	---	9895

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	14100	12	457	9700	9	236	6550	12	212
2	15100	52	2120	9580	9	233	6640	10	179
3	15600	41	1730	8980	6	145	6550	10	177
4	15600	19	800	8580	6	139	6550	18	318
5	16600	33	1480	8020	9	195	6460	5	87
6	16600	18	807	7750	4	84	6100	---	---
7	16100	20	869	7960	9	193	5890	---	---
8	15600	9	379	8050	9	196	5800	---	---
9	15800	9	384	7900	14	299	5560	---	---
10	15600	6	253	7900	10	213	5350	---	---
11	15600	6	253	8350	14	316	5350	---	---
12	16200	14	612	8440	10	228	5000	---	---
13	15600	4	168	8350	10	225	5000	---	---
14	14900	5	201	7900	10	213	5000	---	---
15	14700	4	159	7450	10	201	4500	---	---
16	14100	4	152	7600	10	205	4500	---	---
17	14300	9	347	7150	10	193	4500	---	---
18	13700	4	148	6880	6	111	4500	---	---
19	13200	3	107	6760	10	183	4500	---	---
20	12700	2	69	6550	11	195	4000	---	---
21	12300	4	133	6640	4	72	4000	---	---
22	12200	2	66	6580	9	160	4000	---	---
23	12400	1	33	6580	7	124	4000	---	---
24	12900	3	104	5950	5	80	4000	---	---
25	13100	8	283	5620	10	152	3750	---	---
26	12900	11	383	5560	18	270	3750	---	---
27	12500	7	236	5260	14	199	3750	---	---
28	11900	11	353	5350	15	217	3750	---	---
29	11100	6	180	6100	13	214	3750	---	---
30	10500	11	312	6550	15	265	3500	---	---
31	10100	9	245	---	---	---	3500	---	---
TOTAL	433600	---	13823	220040	---	5756	150050	---	

15267900 RESURRECTION CREEK NEAR HOPE

LOCATION.--Lat 60°53'40", long 149°38'13", in SW¼SE¼ sec.4, T.9 N., R.3 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on right bank 2.1 mi (3.4 km) upstream from mouth on south shore of Turnagain Arm and 1.8 mi (2.9 km) south of Hope.

DRAINAGE AREA.--149 mi^2 (386 km^2).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (55 m), from topographic map.

REMARKS.--Records fair prior to Nov. 18 and those for May 1 to June 1, poor otherwise. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 276 ft^3/s (7.816 m^3/s), 25.16 in/yr (639 mm/yr), 200,000 acre-ft/yr (247 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,380 ft^3/s (95.7 m^3/s) July 12, 1980, gage height, 8.71 ft (2.655 m), from rating curve extended above 2,100 ft^3/s (59 m^3/s); maximum gage height, 8.96 ft (2.731 m) June 18, 1977; minimum daily discharge, 46 ft^3/s (1.30 m^3/s) Mar. 26 to Apr. 13, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (23 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	0500	839	23.8	7.85	2.393	July 12	0500	*3,380	95.7	*8.71	2.655
June 11	2100	1,650	46.7	7.97	2.429	July 21	Unknown	Unknown		Unknown	
June 18	0100	1,500	42.5	7.80	2.377	Aug. 10	Unknown	Unknown		Unknown	
June 26	0100	1,800	51.0	7.97	2.429	Aug. 16	Unknown	Unknown		Unknown	
July 6	2130	1,850	52.4	7.93	2.417						

Minimum daily discharge, 60 ft^3/s (1.70 m^3/s) Mar. 20 to Apr. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	787	312	170	90	130	80	60	221	631	1300	1100	400
2	729	301	170	90	130	80	70	227	630	1230	1000	380
3	673	290	170	90	130	80	70	242	700	1210	950	340
4	630	258	170	80	130	80	70	242	800	1190	930	320
5	625	260	140	80	150	80	70	254	900	1300	900	300
6	601	276	140	80	150	80	80	290	1100	1720	940	270
7	551	343	140	80	150	80	80	302	1600	1760	1000	300
8	546	374	140	80	140	70	80	318	1400	1600	1000	400
9	610	367	140	80	140	70	90	350	1380	1360	1000	430
10	587	440	140	80	140	70	103	354	1350	1240	1100	375
11	590	579	120	80	140	70	110	354	1530	1630	950	350
12	559	560	120	70	140	70	110	358	1440	2390	850	335
13	530	524	120	70	137	70	110	370	1270	1740	790	400
14	503	445	120	70	120	66	100	374	1200	1530	700	500
15	476	475	120	70	120	65	100	378	1170	1400	750	600
16	465	451	120	70	120	65	100	410	1170	1300	850	690
17	432	396	120	100	120	65	100	485	1300	1300	800	550
18	406	374	100	100	120	65	100	562	1410	1300	770	460
19	384	350	100	150	100	65	110	598	1260	1300	700	420
20	366	300	100	150	100	60	110	556	1370	1300	650	380
21	357	250	100	150	100	60	125	544	1250	1400	600	365
22	353	250	100	150	100	60	130	526	1160	1400	550	340
23	351	200	100	150	100	60	130	538	1160	1400	500	325
24	344	200	100	150	90	60	150	544	1270	1400	470	320
25	327	200	100	130	90	60	150	610	1580	1300	450	320
26	313	198	90	130	90	60	150	673	1680	1300	440	350
27	310	190	90	130	90	60	170	652	1550	1300	430	500
28	298	190	90	130	90	60	170	673	1550	1200	420	450
29	294	170	90	130	90	60	200	659	1470	1200	410	410
30	346	170	90	130	---	60	200	659	1380	1200	400	500
31	347	---	90	130	---	60	---	645	---	1100	420	---
TOTAL	14690	9693	3700	3270	3447	2091	3398	13968	37661	43300	22820	12080
MEAN	474	323	119	105	119	67.5	113	451	1255	1397	736	403
MAX	787	579	170	150	150	80	200	673	1680	2390	1100	690
MIN	294	170	90	70	90	60	60	221	630	1100	400	270
CFSM	3.18	2.17	.80	.71	.80	.45	.76	3.03	8.42	9.38	4.94	2.71
IN.	3.67	2.42	.92	.82	.86	.52	.85	3.49	9.40	10.81	5.70	3.02
AC-FT	29140	19230	7340	6490	6840	4150	6740	27710	74700	85890	45260	23960

CAL YR 1979 TOTAL 114831 MEAN 315 MAX 888 MIN 58 CFSM 2.11 IN 28.67 AC-FT 227800
WTR YR 1980 TOTAL 170118 MEAN 465 MAX 2390 MIN 60 CFSM 3.12 IN 42.47 AC-FT 337400

NOTE.--No gage-height record Nov. 26 to Apr. 30 and July 15 to Sept. 30.

15271000 SIXMILE CREEK NEAR HOPE

LOCATION.--Lat 60°49'15", long 149°25'31", in SW¼SE¼ sec.34, T.8 N., R.1 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on left bank 6.0 mi (9.7 km) upstream from mouth at Turnagain Arm and 10.6 mi (17.1 km) southeast of Hope. Prior to Nov. 26, 1979, at site 0.8 (1.3 km) downstream.

DRAINAGE AREA.--234 mi^2 (606 km^2).

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map. Prior to Nov. 26, 1979, recording gage at site 0.8 mi (1.3 km) downstream at different datum.

REMARKS.--Records good except those for period of no gage-height record, Nov. 26 to June 3, which are poor. Daily discharges for period after Nov. 26 and prior to release of water stored upstream of avalanche dam were computed as if they were inflow to reservoir storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded discharge, 8,070 ft^3/s (229 m^3/s) July 12, 1980, gage height, 13.22 ft (4.029 m); but was probably more sometime during period Nov. 26 to Jan. 9, 1980 on release of storage behind snow-avalanche dam upstream from former gage site. This flood destroyed the gage and reached a stage of about 29.0 ft (8.8 m), site and datum then in use. Minimum daily discharge, about 160 ft^3/s (4.5 m^3/s) Apr. 1-3, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 1969 reached a stage of 20.8 ft (6.34 m), former site and datum, from floodmarks, 7,300 ft^3/s (207 m^3/s) from rating curve extended above 2,500 ft^3/s (71 m^3/s) on basis of slope-area measurement at gage height of 17.62 ft (5.371 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,500 ft^3/s (127 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	0230	6,390	181	(a)17.62	5.371	June 26	0200	4,810	136	12.21	3.722
(b)	Unknown	*Unknown		*(a)29.0	8.8	July 8	0400	5,020	142	12.29	3.746
June 7	0600	5,020	142	12.29	3.746	July 12	1200	8,070	229	13.22	4.029

a At site and datum then in use.
b Sometime during the period Nov. 26 to Jan. 9.
* Minimum daily discharge, about 160 ft^3/s (4.5 m^3/s) Apr. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5840	754	600	250	220	230	160	700	2000	3370	2910	1240
2	4510	727	550	250	220	230	160	729	2500	3300	2780	1120
3	3590	696	500	250	220	230	160	750	3000	3220	2640	982
4	3280	648	500	250	250	230	170	750	3450	3070	2480	889
5	3080	614	450	250	300	230	170	800	4240	3530	2400	816
6	2430	621	450	240	300	200	200	800	4480	4310	2480	766
7	1760	673	400	239	280	200	220	850	4830	4830	2770	772
8	1710	674	400	220	260	200	240	900	4460	4860	2590	1290
9	2780	683	400	220	260	200	260	900	4060	4270	2720	1260
10	2400	763	350	220	260	200	300	1000	3710	3760	3130	1010
11	2520	919	350	220	260	200	300	1000	3760	4760	2730	889
12	1930	882	350	220	260	200	300	1100	3550	7570	2360	842
13	1550	834	350	220	252	200	300	1100	3240	5860	2210	1160
14	1320	723	350	220	250	202	280	1200	3240	4680	2000	1450
15	1210	747	300	220	250	200	280	1200	3160	4060	1830	1800
16	1540	757	300	220	250	200	280	1400	3300	3670	2090	2060
17	1300	678	300	220	230	200	280	1600	3760	3550	1930	1720
18	1130	629	300	220	230	200	290	1800	3590	3510	1940	1370
19	994	637	300	220	230	200	300	2000	3070	3410	1830	1180
20	904	622	300	250	230	200	300	2200	3200	3710	1690	1070
21	845	599	300	250	230	200	351	1970	3070	3840	1610	1030
22	808	600	300	250	230	170	400	1900	2980	3840	1470	967
23	801	581	300	240	230	170	400	1900	3070	4080	1360	924
24	833	525	250	240	230	170	450	1900	3450	4060	1300	902
25	761	524	250	220	230	170	450	2000	4080	3690	1250	882
26	721	500	250	220	230	170	500	2000	4480	3550	1210	974
27	716	470	250	220	230	170	500	2000	4310	3610	1180	1570
28	701	450	250	220	230	170	600	2000	4220	3510	1190	1300
29	692	500	250	220	230	170	600	2000	3990	3280	1170	1230
30	798	600	250	220	---	170	700	1920	3740	3690	1110	3000
31	843	---	250	220	---	170	---	1900	---	3130	1230	---
TOTAL	54297	19630	10700	7139	7082	6052	9901	44269	107990	123580	61590	36465
MEAN	1752	654	345	230	244	195	330	1428	3600	3986	1987	1216
MAX	5840	919	600	250	300	230	700	2200	4830	7570	3130	3000
MIN	692	450	250	220	220	170	160	700	2000	3070	1110	766
CFSM	7.49	2.80	1.47	.98	1.04	.83	1.41	6.10	15.4	17.0	8.49	5.20
IN.	8.63	3.12	1.70	1.13	1.13	.96	1.57	7.04	17.17	19.65	9.79	5.80
AC-FT	107700	38940	21220	14160	14050	12000	19640	87810	214200	245100	122200	72330

WTR YR 1980 TOTAL 488695 MEAN 1335 MAX 7570 MIN 160 CFSM 5.71 IN 77.69 AC-FT 969300

15273050 RABBIT CREEK AT ANCHORAGE

LOCATION.--Lat 61°04'54", long 149°49'30", in SW¼SW¼ sec.33, T.12 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 0.2 mi (0.3 km) downstream from Old Seward Highway, 0.5 mi (0.8 km) upstream from Little Rabbit Creek, and 9.5 mi (15 km) south of Anchorage Post Office.

DRAINAGE AREA.--15 mi^2 (39 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1979 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 42 ft (13 m), from topographic map.

REMARKS.--Records fair prior to Mar. 30 and poor thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 207 ft^3/s (5.86 m^3/s), June 27, 1980, gage height, 1.87 ft (0.570 m), by computation of slope-area measurement of peak flow; minimum, 5.4 ft^3/s (0.15 m^3/s) Mar. 28, 1980, gage height, 0.24 ft (0.073 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 207 ft^3/s (5.86 m^3/s), June 27, gage height, 1.87 ft (0.570 m); minimum recorded, 5.4 ft^3/s (0.15 m^3/s), Mar. 28, gage height, 0.24 ft (0.073 m), but may have been less during period of no gage-height record, Dec. 5 to Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	22	31	13	11	6.8	8.5	17	45	56	42	41
2	22	22	29	12	11	6.8	9.0	19	41	58	41	38
3	22	21	28	12	11	6.8	10	19	44	58	39	36
4	22	20	27	12	11	6.8	11	16	47	60	38	33
5	23	27	26	12	11	6.8	12	15	51	64	38	32
6	24	21	25	12	11	6.8	13	16	52	68	40	32
7	22	24	24	12	11	6.8	14	19	50	73	44	32
8	22	25	23	12	11	6.8	16	18	46	70	46	31
9	30	25	22	12	11	6.8	17	19	47	65	45	30
10	26	30	22	12	11	6.0	17	19	52	62	93	29
11	25	42	21	12	12	6.0	17	20	65	70	40	29
12	24	41	20	12	12	6.0	16	22	68	80	38	31
13	24	38	20	12	10	6.0	15	21	62	90	37	35
14	23	37	19	12	9.6	6.0	15	20	58	70	37	40
15	22	37	19	12	9.2	6.0	15	19	54	57	39	48
16	22	33	18	12	9.0	6.0	16	20	64	54	47	60
17	20	32	17	12	9.0	6.0	16	22	74	50	66	50
18	20	30	17	12	9.0	6.0	16	25	62	49	62	43
19	20	29	16	11	8.5	6.0	16	33	60	48	58	40
20	19	27	16	11	8.5	6.0	16	28	68	48	56	38
21	19	27	16	11	8.5	6.0	16	28	60	50	54	37
22	19	28	15	11	8.5	6.0	16	27	55	52	51	37
23	19	27	15	11	8.0	5.7	15	28	47	50	51	36
24	19	26	14	11	8.0	5.7	15	28	52	49	54	35
25	19	25	14	11	7.6	5.7	15	30	57	49	57	34
26	19	25	15	11	7.2	5.7	15	34	80	47	57	35
27	20	27	15	11	7.2	5.7	15	39	160	51	56	37
28	20	29	14	11	7.2	5.4	16	36	110	54	55	35
29	20	38	14	11	6.8	5.7	16	36	70	51	50	36
30	21	36	13	11	---	6.0	16	45	56	47	47	39
31	24	---	13	11	---	8.0	---	46	---	45	45	---
TOTAL	673	871	598	360	275.8	192.8	440.5	784	1857	1795	1523	1109
MEAN	21.7	29.0	19.3	11.6	9.51	6.22	14.7	25.3	61.9	57.9	49.1	37.0
MAX	30	42	31	13	12	8.0	17	46	160	90	93	60
MIN	19	20	13	11	6.8	5.4	8.5	15	41	45	37	29
CFSM	1.45	1.93	1.29	.77	.63	.42	.98	1.69	4.13	3.86	3.27	2.47
IN.	1.67	2.16	1.48	.89	.68	.48	1.09	1.94	4.61	4.45	3.78	2.75
AC-FT	1330	1730	1190	714	547	382	874	1560	3680	3560	3020	2200

WTR YR 1980 TOTAL 10479.1 MEAN 28.6 MAX 160 MIN 5.4 CFSM 1.91 IN 25.99 AC-FT 20790

NOTE.--No gage-height record Dec. 5 to Feb. 10 and Apr. 1 to Sept. 30.

15273050 RABBIT CREEK AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)
OCT									
25...	1530	--	--	--	20	70	6.6	--	3.0
NOV									
28...	1315	19	--	--	29	95	--	7.0	1.5
28...	1316	--	4.0	.3	--	95	--	--	1.6
28...	1317	--	10	.3	--	95	--	--	1.6
28...	1318	--	16	.3	--	95	--	--	1.6
JAN									
02...	1100	15	--	--	12	85	6.8	-26.0	.0
02...	1101	--	5.0	--	--	85	--	--	.1
02...	1102	--	10	--	--	85	--	--	.1
FEB									
11...	1345	--	--	--	11	120	6.8	6.0	1.0
MAR									
27...	1430	18	--	--	5.8	108	6.8	3.0	1.0
27...	1431	--	2.0	--	--	108	6.8	--	1.0
27...	1432	--	6.0	--	--	108	6.8	--	1.0
27...	1433	--	10	--	--	108	6.8	--	1.0
27...	1434	--	14	--	--	108	6.8	--	1.0
APR									
18...	1330	--	--	--	16	130	7.4	9.0	3.0
28...	1430	--	--	--	16	125	--	--	5.5
MAY									
19...	1400	--	--	--	32	104	7.4	14.0	8.5
20...	1500	--	--	--	32	--	--	--	--
29...	1245	--	--	--	38	92	7.3	14.0	6.0
JUN									
20...	1230	--	--	--	67	78	7.4	10.5	5.0
30...	1415	--	--	--	56	70	7.4	14.0	6.0
JUL									
15...	1400	--	--	--	57	54	6.8	--	7.0
28...	1400	--	--	--	53	75	--	--	8.5
SEP									
08...	1215	--	--	--	31	72	7.0	12.5	6.5
08...	1216	--	3.0	--	--	72	--	--	6.3
08...	1217	--	8.0	--	--	72	--	--	6.3
08...	1218	--	13	--	--	72	--	--	6.3

15273050 RABBIT CREEK AT ANCHORAGE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT									
25...	13.0	98	--	K3	<1	31	0	--	--
NOV									
28...	13.6	98	752	--	--	32	0	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
JAN									
02...	14.4	98	766	--	--	38	0	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
FEB									
11...	--	--	--	--	--	40	0	--	--
MAR									
27...	14.0	99	749	K860	K11	43	0	--	--
27...	14.0	99	--	--	--	--	--	--	--
27...	14.0	99	--	--	--	--	--	--	--
27...	14.0	99	--	--	--	--	--	--	--
27...	14.0	99	--	--	--	--	--	--	--
APR									
18...	13.2	100	741	--	--	50	0	--	--
28...	--	--	--	--	--	48	0	--	--
MAY									
19...	--	--	--	--	--	38	0	--	--
20...	--	--	--	29	--	--	--	--	--
29...	12.5	100	760	--	--	30	0	--	--
JUN									
20...	12.6	98	757	--	--	25	0	114	21
30...	12.4	99	767	--	--	24	0	68	10
JUL									
15...	12.0	99	763	--	--	22	0	--	--
28...	11.6	100	760	--	--	20	0	--	--
SEP									
08...	11.6	99	715	--	--	30	0	--	--
08...	11.6	--	--	--	--	--	--	--	--
08...	11.5	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

15273102 LITTLE RABBIT CREEK AT ANCHORAGE

LOCATION.--Lat 61°04'37", long 149°48'47", in NE¼NE¼ sec.4, T.11 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank 250 ft (76 m) downstream from Old Seward Highway, 0.2 mi (0.3 km) upstream from mouth, and 10 mi (16 km) south of Anchorage Post Office.

DRAINAGE AREA.--5.94 mi^2 (15.38 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1979 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 36 ft (11 m), from topographic map. Prior to Aug. 14, 1979 at site 150 ft (46 m) upstream at different datum.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62 ft^3/s (1.76 m^3/s) June 26, 1979, gage height, 1.00 ft (0.305 m), site and datum then in use; maximum gage height, 2.13 ft (0.649 m) Nov. 10, 1979; minimum daily discharge, 2.0 ft^3/s (0.06 m^3/s), Mar. 5-26, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42 ft^3/s (1.19 m^3/s) May 30, gage height, 1.49 ft (0.454 m); maximum gage height, 2.13 ft (0.649 m) Nov. 10; minimum daily discharge, about 2.0 ft^3/s (0.06 m^3/s) Mar. 5-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	9.5	12	4.0	4.0	2.5	4.0	9.5	20	18	12	12
2	5.5	8.5	11	4.0	4.0	2.5	5.0	9.5	19	17	11	11
3	5.5	7.5	10	4.0	4.0	2.5	6.0	10	18	16	11	10
4	5.0	7.0	9.0	4.0	4.0	2.5	7.0	10	18	15	11	9.5
5	5.5	9.0	8.0	4.0	4.0	2.0	8.0	10	19	15	11	9.0
6	5.0	9.5	7.0	4.0	4.0	2.0	8.0	10	20	16	11	8.5
7	4.5	13	6.5	4.0	4.0	2.0	9.0	10	20	16	15	8.5
8	5.0	10	6.0	4.0	4.5	2.0	10	11	19	15	15	8.0
9	12	10	5.5	4.0	5.0	2.0	9.5	11	18	14	15	8.0
10	9.0	16	5.5	4.0	5.5	2.0	9.5	11	17	14	15	8.0
11	8.0	21	5.0	4.0	7.0	2.0	9.0	11	21	14	15	8.0
12	7.5	14	5.0	4.0	7.0	2.0	9.0	11	22	14	15	9.0
13	9.0	14	4.5	4.0	6.0	2.0	9.0	10	21	14	15	11
14	7.5	9.5	4.5	4.0	5.5	2.0	9.0	10	20	14	15	14
15	7.0	13	4.0	4.0	5.0	2.0	8.5	10	19	13	15	17
16	7.0	13	4.0	4.0	4.5	2.0	8.5	12	18	14	15	15
17	6.5	11	4.0	4.0	4.0	2.0	8.0	15	20	13	15	14
18	6.0	11	3.5	4.0	4.0	2.0	8.0	17	20	13	14	13
19	5.5	10	3.5	4.0	3.5	2.0	8.0	16	19	12	14	12
20	5.5	10	3.5	4.0	3.5	2.0	8.0	16	20	12	14	11
21	5.5	9.0	3.5	4.0	3.0	2.0	8.0	15	20	11	15	12
22	5.5	10	3.5	4.0	3.0	2.0	8.0	15	19	11	14	12
23	5.5	9.0	3.5	4.0	3.0	2.0	8.5	15	18	10	14	11
24	5.0	8.0	3.5	4.0	3.0	2.0	8.5	14	18	10	13	11
25	5.0	8.5	3.5	4.0	2.5	2.0	8.5	14	19	9.5	13	11
26	5.5	7.0	3.5	4.0	2.5	2.0	9.0	14	18	9.5	13	10
27	5.5	10	3.5	4.0	2.5	2.5	9.0	14	17	10	14	10
28	5.5	13	3.5	4.0	2.5	2.5	9.0	13	17	9.0	15	10
29	6.0	17	3.5	4.0	2.5	3.0	9.0	13	18	10	14	10
30	9.5	12	4.0	4.0	---	3.0	9.5	26	19	10	14	13
31	11	---	4.0	4.0	---	3.5	---	28	---	12	13	---
TOTAL	201.5	330.0	161.5	124.0	117.5	68.5	248.0	411.0	571	401.0	426	326.5
MEAN	6.50	11.0	5.21	4.00	4.05	2.21	8.27	13.3	19.0	12.9	13.7	10.9
MAX	12	21	12	4.0	7.0	3.5	10	28	22	18	15	17
MIN	4.5	7.0	3.5	4.0	2.5	2.0	4.0	9.5	17	9.0	11	8.0
CFSM	1.09	1.85	.88	.67	.68	.37	1.39	2.24	3.20	2.17	2.31	1.84
IN.	1.26	2.07	1.01	.78	.74	.43	1.55	2.57	3.58	2.51	2.67	2.04
AC-FT	400	655	320	246	233	136	492	815	1130	795	845	648

WTR YR 1980 TOTAL 3386.5 MEAN 9.25 MAX 28 MIN 2.0 CFSM 1.56 IN 21.20 AC-FT 6720

15273102 LITTLE RABBIT CREEK AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)
OCT										
25...	1430	--	--	--	3.9	130	6.8	--	2.5	5
NOV										
28...	1400	10	--	--	20	115	7.2	4.5	.5	--
28...	1401	--	2.0	.3	--	115	--	--	.6	--
28...	1402	--	5.0	.3	--	115	--	--	.6	--
28...	1403	--	8.0	.3	--	115	--	--	.6	--
JAN										
04...	1330	--	--	--	4.1	140	6.9	-20.0	.5	--
FEB										
11...	1100	--	--	--	7.3	140	6.8	9.0	.5	--
MAR										
26...	1500	--	--	--	2.1	155	7.5	6.0	.5	30
APR										
18...	1500	--	--	--	8.1	145	7.5	9.0	3.0	--
28...	1330	--	--	--	9.2	125	--	--	5.0	--
MAY										
19...	1245	--	--	--	16	110	7.4	--	6.5	--
20...	1530	--	--	--	16	--	--	--	--	--
29...	1500	--	--	--	14	110	7.4	--	6.5	--
30...	1330	--	--	--	25	108	--	8.0	5.0	--
JUN										
18...	1530	--	--	--	19	90	7.4	12.0	6.5	--
JUL										
15...	1030	--	--	--	13	100	7.4	--	8.0	--
28...	1215	--	--	--	8.9	--	6.6	16.5	9.0	--
SEP										
08...	1330	15	--	--	8.0	120	7.4	11.5	7.0	--
08...	1331	--	5.0	--	--	120	--	--	6.9	--
08...	1332	--	10	--	--	120	--	--	6.8	--

DATE	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT									
25...	13.2	100	739	K2	K2	59	0	2	.02
NOV									
28...	13.8	97	750	--	--	39	0	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
JAN									
04...	14.7	100	776	--	--	60	0	--	--
FEB									
11...	14.1	97	764	--	--	56	0	--	--
MAR									
26...	14.0	98	--	K2	43	70	0	46	.26
APR									
18...	13.2	100	741	--	--	58	0	--	--
28...	--	--	--	--	--	--	--	--	--
MAY									
19...	--	--	--	--	--	40	--	--	--
20...	--	--	--	K11	--	--	--	--	--
29...	12.6	102	--	--	--	40	--	--	--
30...	--	--	--	--	--	--	--	150	10
JUN									
18...	--	--	--	--	--	36	--	129	6.6
JUL									
15...	11.8	99	762	--	--	34	0	--	--
28...	11.4	102	E760	--	--	51	0	--	--
SEP									
08...	11.6	101	715	--	--	52	0	--	--
08...	11.6	101	--	--	--	--	--	--	--
08...	11.6	101	--	--	--	--	--	--	--

E ESTIMATED
K NON-IDEAL COLONY COUNT

15274300 NORTH FORK CAMPBELL CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°10'10", long 149°45'43", in SW¼ sec.35, T.13 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 40 ft (12 m) upstream from Campbell Airstrip road, 2.5 mi (4.0 km) upstream from confluence with South Fork, and 5.5 mi (8.8 km) southeast of Anchorage Post Office.

DRAINAGE AREA.--13.4 mi² (34.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximum, water years 1967-74. June 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (91 m), from topographic map. May 7, 1967 to June 5, 1974, crest-stage gage at site 25 ft (7.6 m) downstream at same datum.

REMARKS.--Records good except those for Nov. 14 to Apr. 21, which are fair.

AVERAGE DISCHARGE.--6 years, 16.8 ft³/s (0.476 m³/s), 17.03 in/yr (433 mm/yr), 12,170 acre-ft/yr (15.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 107 ft³/s (3.03 m³/s) Aug. 9, 1971; maximum gage height, 12.18 ft, (3.712 m) Aug. 9, 1971, July 12, 1980; minimum daily discharge, about 1.0 ft³/s (0.03 m³/s) Dec. 8, 9, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 92 ft³/s (2.61 m³/s) July 12, gage height, 12.18 ft (3.712 m); minimum daily, about 4.5 ft³/s (0.13 m³/s) Feb. 19 and 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	18	18	11	9.0	6.0	6.5	7.4	15	50	46	38
2	28	18	16	11	8.0	6.0	6.5	7.6	14	47	45	37
3	28	17	16	10	8.0	6.0	7.0	7.6	15	48	42	36
4	28	16	14	10	8.0	6.0	7.0	7.1	17	49	39	35
5	25	16	13	10	8.5	6.0	7.5	6.9	18	53	37	33
6	28	16	12	10	9.0	6.0	8.0	7.1	19	66	38	32
7	26	18	11	9.5	10	6.0	8.5	7.6	19	72	44	31
8	28	18	10	9.5	11	6.0	9.0	7.4	18	64	49	31
9	31	19	10	9.0	11	6.0	9.5	7.6	20	58	45	30
10	30	19	10	9.0	11	6.0	9.5	7.6	26	55	44	28
11	29	20	11	8.5	11	6.0	9.0	7.9	36	60	41	27
12	28	21	11	8.0	11	6.0	9.0	8.4	38	81	38	30
13	26	22	12	8.0	10	6.0	8.5	8.2	34	81	37	37
14	25	19	12	8.0	9.0	6.0	8.5	7.9	31	65	35	34
15	24	28	13	7.5	7.5	6.0	8.5	7.6	30	60	34	50
16	24	22	13	7.5	6.5	6.0	8.5	7.9	32	57	48	70
17	22	21	14	7.0	5.5	6.0	9.0	8.4	36	52	63	57
18	20	20	14	11	5.0	6.0	9.0	9.0	44	50	58	48
19	19	18	14	14	4.5	6.0	9.0	9.6	39	46	55	44
20	18	18	14	13	4.5	6.0	9.0	10	41	47	51	42
21	18	17	14	12	5.0	6.0	8.5	10	39	53	51	41
22	18	17	14	11	8.0	6.0	7.6	10	37	51	48	41
23	18	17	14	11	8.0	6.0	7.4	10	37	50	46	39
24	18	17	13	10	7.0	6.0	6.9	10	41	50	44	40
25	18	16	13	10	7.0	6.0	6.6	11	50	49	42	39
26	17	15	13	9.5	6.5	6.0	6.9	12	51	47	40	38
27	18	16	13	9.0	6.5	6.0	7.1	14	50	52	39	40
28	18	18	12	9.0	6.5	6.5	7.1	13	50	59	42	41
29	17	21	12	8.5	6.5	6.5	7.4	13	51	54	42	40
30	18	18	12	8.0	---	6.5	7.4	16	52	51	41	43
31	20	---	12	8.0	---	6.5	---	17	---	49	40	---
TOTAL	710	556	400	297.5	228.0	188.0	239.9	294.8	1000	1726	1364	1172
MEAN	22.9	18.5	12.9	9.60	7.86	6.06	8.00	9.51	33.3	55.7	44.0	39.1
MAX	31	28	18	14	11	6.5	9.5	17	52	81	63	70
MIN	17	15	10	7.0	4.5	6.0	6.5	6.9	14	46	34	27
CFSM	1.71	1.38	.96	.72	.59	.45	.60	.71	2.49	4.16	3.28	2.92
IN.	1.97	1.54	1.11	.83	.63	.52	.67	.82	2.78	4.79	3.79	3.25
AC-FT	1410	1100	793	590	452	373	476	585	1980	3420	2710	2320

CAL YR 1979 TOTAL 7444.8 MEAN 20.4 MAX 67 MIN 2.0 CFSM 1.52 IN 20.67 AC-FT 14770
WTR YR 1980 TOTAL 8176.2 MEAN 22.3 MAX 81 MIN 4.5 CFSM 1.66 IN 22.70 AC-FT 16220

NOTE.--No gage-height record Dec.9 to Apr. 17.

15274300 NORTH FORK CAMPBELL CREEK NEAR ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-49, 1958-61, 1966-68, 1971, 1975-76, and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
NOV									
06...	1545	--	--	18	120	--	--	2.0	--
16...	1525	--	--	23	125	--	--	.5	--
DEC									
07...	1330	--	--	10	135	--	--	.0	--
JAN									
21...	1420	--	--	12	150	--	--	.0	--
FEB									
06...	1300	--	--	8.8	140	--	--	1.0	--
24...	1645	--	--	7.3	140	--	--	.5	--
29...	1305	--	--	6.3	140	--	--	.5	--
MAR									
19...	1030	--	--	6.0	140	6.5	--	.0	14.4
28...	1550	--	--	6.3	145	--	--	2.0	--
APR									
04...	1100	--	--	6.9	140	6.7	--	1.0	13.8
07...	1430	--	--	8.7	--	--	--	2.0	--
09...	1415	--	--	9.8	130	6.8	--	3.0	12.9
14...	1640	--	--	8.4	135	--	--	3.5	--
21...	1420	--	--	9.3	135	--	--	7.0	--
28...	1100	--	--	8.0	140	6.9	--	5.0	12.5
MAY									
02...	1045	--	--	8.4	135	--	--	4.0	13.0
20...	1015	--	--	12	130	7.4	--	5.0	12.5
JUN									
04...	1450	--	--	16	115	--	--	10.0	--
09...	1000	--	--	--	100	6.9	--	6.0	12.4
10...	2200	--	--	30	90	6.7	--	5.0	12.5
12...	2030	--	--	38	90	6.5	--	5.0	12.3
16...	0830	16	--	--	90	7.0	--	5.0	12.7
16...	0831	--	4.0	--	90	7.0	--	--	--
16...	0832	--	8.0	--	90	7.0	--	--	--
16...	0833	--	12	--	90	7.0	--	--	--
18...	1245	--	--	46	95	6.6	--	5.0	12.2
19...	2130	--	--	--	95	6.8	--	7.0	11.6
23...	1200	--	--	--	95	6.7	--	8.0	11.9
25...	2200	--	--	--	90	6.3	--	6.5	11.6
27...	1120	--	--	--	90	6.4	--	8.0	12.2
JUL									
01...	1230	--	--	46	95	6.7	18.5	7.0	12.1
06...	1930	--	--	70	85	6.4	--	9.0	--
07...	1445	--	--	73	90	6.4	--	8.0	11.7
12...	1700	--	--	87	--	--	--	9.0	--
SEP									
09...	1500	--	--	29	110	7.0	--	6.0	13.4

15274300 NORTH FORK CAMPBELL CREEK NEAR ANCHORAGE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV									
06...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
DEC									
07...	--	--	--	--	--	--	--	--	--
JAN									
21...	--	--	--	--	--	--	--	--	--
FEB									
06...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
MAR									
19...	99	--	0	K10	<1	59	0	5	.08
28...	--	--	--	--	--	--	--	--	--
APR									
04...	99	--	10	37	40	56	0	2	.04
07...	--	--	--	20	31	--	--	--	--
09...	97	--	8	K6	K10	54	0	6	.16
14...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
28...	100	--	--	--	--	59	--	--	--
MAY									
02...	100	--	9	K17	--	61	--	5	.11
20...	100	--	--	K15	--	52	--	--	--
JUN									
04...	--	--	--	--	--	--	--	--	--
09...	99	762	16	27	--	41	0	15	--
10...	98	--	--	--	--	36	--	36	2.9
12...	97	750	28	K67	--	34	0	23	2.4
16...	99	762	5	K22	--	38	0	5	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
18...	95	--	--	K60	--	37	--	22	2.7
19...	98	749	22	31	--	38	0	11	--
23...	100	--	--	K10	--	39	--	6	--
25...	96	--	--	35	--	36	--	22	--
27...	103	--	--	K14	--	37	--	12	--
JUL									
01...	99	758	--	K12	--	40	0	19	2.4
06...	--	--	--	--	--	34	0	42	7.9
07...	99	755	--	K47	--	33	0	30	5.9
12...	--	--	--	--	--	--	--	69	16
SEP									
09...	107	757	--	K20	--	45	0	--	--

K NON-IDEAL COLONY COUNT

15274600 CAMPBELL CREEK NEAR SPENARD

LOCATION.--Lat 61°08'17", long 149°55'20", on line between sec.11 and 14, T.12 N., R.4 W., Municipality of Anchorage, Hydrologic Unit 19050002, on upstream right wingwall of bridge at Dimond Boulevard crossing, 2.0 mi (3.2 km) upstream from mouth, and 4.3 mi (6.9 km) south of Spenard.

DRAINAGE AREA.--69.7 mi² (180.5 km²).

WATER-DISCHARGE RECORDS

RERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 18.04 ft (5.499 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for Nov. 14 to Apr. 17, which are poor.

AVERAGE DISCHARGE.--14 years, 62.8 ft³/s (1.778 m³/s), 12.24 in/yr (311 mm/yr), 45,500 acre-ft/yr (56.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 421 ft³/s (11.9 m³/s) Aug. 9, 1971, gage height, 3.63 ft (1.106 m); maximum gage height recorded, 5.29 ft (1.612 m) Apr. 20, 1976, backwater from ice; minimum daily discharge, 2.2 ft³/s (0.062 m³/s) Feb. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 382 ft³/s (10.8 m³/s) July 13, gage height, 3.17 ft (0.966 m); minimum daily discharge, about 20 ft³/s (0.57 m³/s) on several days in Dec., Feb., and Mar.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	82	45	50	25	25	40	46	103	206	182	136
2	127	75	35	50	25	25	50	46	97	189	173	129
3	128	71	35	45	25	25	55	46	104	192	177	124
4	121	59	30	45	25	25	75	47	118	189	158	120
5	118	61	25	45	30	25	80	47	146	191	145	116
6	147	78	25	40	30	25	80	47	168	248	141	112
7	123	83	20	35	35	25	80	49	192	312	177	109
8	120	100	20	35	35	25	80	49	169	285	215	105
9	175	99	20	35	40	25	75	49	149	246	182	104
10	159	96	25	30	45	25	65	51	148	223	176	99
11	144	152	30	30	45	25	60	52	181	249	162	95
12	131	140	35	30	40	20	60	52	184	330	150	94
13	125	132	40	30	35	20	60	55	170	358	149	136
14	113	120	40	30	30	20	55	51	162	277	144	136
15	108	140	45	30	30	20	50	52	158	248	136	176
16	102	120	45	30	25	20	50	53	162	239	233	263
17	97	110	50	30	25	20	46	61	174	216	288	218
18	91	100	50	40	20	20	45	65	236	201	269	184
19	84	90	50	45	20	20	45	69	216	186	251	162
20	77	85	50	50	20	20	46	76	233	181	219	150
21	77	75	50	45	20	20	48	69	225	204	213	149
22	80	70	50	40	25	20	47	66	195	189	206	156
23	75	65	50	35	30	20	43	72	184	182	185	146
24	75	60	50	30	30	20	42	70	186	182	172	156
25	75	55	50	30	30	20	42	71	233	177	160	148
26	71	50	50	30	25	20	41	85	245	170	150	144
27	75	45	50	25	25	20	42	89	215	186	145	170
28	81	50	50	25	25	20	44	88	209	234	162	169
29	74	60	50	25	25	20	46	93	216	212	160	158
30	88	50	50	25	---	30	46	109	221	212	146	176
31	105	---	50	25	---	35	---	113	---	197	142	---
TOTAL	3288	2573	1265	1090	840	700	1638	1988	5399	6911	5568	4340
MEAN	106	85.8	40.8	35.2	29.0	22.6	54.6	64.1	180	223	180	145
MAX	175	152	50	50	45	35	80	113	245	358	288	263
MIN	71	45	20	25	20	20	40	46	97	170	136	94
CFSM	1.52	1.23	.59	.51	.42	.32	.78	.92	2.58	3.20	2.58	2.08
IN.	1.75	1.37	.68	.58	.45	.37	.87	1.06	2.88	3.69	2.97	2.32
AC-FT	6520	5100	2510	2160	1670	1390	3250	3940	10710	13710	11040	8610

CAL YR 1979 TOTAL 29076.0 MEAN 79.7 MAX 351 MIN 3.0 CFSM 1.14 IN 15.52 AC-FT 57670
WTR YR 1980 TOTAL 35600.0 MEAN 97.3 MAX 358 MIN 20 CFSM 1.40 IN 19.00 AC-FT 70610

NOTE.--No gage-height record Dec. 2 to Apr. 4.

15274600 CAMPBELL CREEK NEAR SPENARD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-61, 1966-73, 1975-77, and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)
NOV								
06...	1405	82	105	--	.0	--	--	--
16...	1345	117	125	--	.5	--	--	--
27...	1115	45	125	--	.0	--	--	--
DEC								
07...	1215	19	150	--	.0	--	--	--
FEB								
06...	1100	36	125	--	.0	--	--	--
19...	0950	20	140	--	.5	--	--	--
29...	1000	26	135	--	.0	--	--	--
MAR								
18...	1130	19	130	6.1	.0	14.4	99	--
28...	1300	20	150	6.5	.0	--	--	--
APR								
02...	1330	48	140	6.8	.0	13.8	95	--
03...	1500	68	140	6.7	.0	13.2	90	--
04...	1815	102	135	6.8	.0	13.1	91	--
05...	1900	94	140	6.6	.0	13.1	92	--
06...	0755	57	135	6.7	.0	13.0	91	--
06...	1730	103	130	6.5	.0	12.8	90	--
07...	1100	68	130	6.8	.0	13.0	91	--
07...	1815	92	130	6.4	.0	13.0	90	--
08...	1045	63	135	6.9	.0	13.4	92	--
08...	1730	97	130	6.9	.0	13.2	90	--
09...	1100	66	130	6.9	.0	13.4	92	--
09...	1845	79	130	6.5	.0	12.5	87	--
10...	1000	56	135	6.6	.0	--	--	--
10...	1645	67	140	6.6	.0	--	--	--
14...	1440	59	140	--	.5	--	--	--
16...	1515	48	150	--	4.0	--	--	--
21...	1100	50	150	--	3.0	--	--	--
28...	1440	47	150	7.2	6.0	12.4	101	--
MAY								
02...	0930	44	145	7.2	4.5	12.6	98	--
20...	1330	74	120	7.6	7.0	12.6	104	--
JUN								
04...	1155	112	90	--	8.0	--	--	--
09...	2000	142	80	6.6	9.0	12.4	106	768
11...	0745	184	70	6.7	6.0	12.4	99	--
13...	0800	--	75	6.7	5.5	12.4	98	--
16...	1730	--	75	6.7	11.5	11.3	103	765
18...	1530	258	75	6.7	6.5	12.3	98	768
20...	0900	--	80	6.6	6.5	12.2	98	760
23...	1600	--	75	6.7	10.5	11.7	105	--
26...	0930	--	65	6.3	7.0	12.0	102	--
27...	1500	--	70	6.7	11.0	11.7	105	--

15274600 CAMPBELL CREEK NEAR SPENARD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV								
06...	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
DEC								
07...	--	--	--	--	--	--	--	--
FEB								
06...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
MAR								
18...	1	K10	K9	57	0	1	.05	--
28...	--	--	--	60	--	--	--	--
APR								
02...	36	110	930	58	0	76	9.8	--
03...	55	230	370	51	0	144	26	--
04...	56	510	1300	46	0	155	43	94
05...	47	230	720	51	0	109	28	--
06...	--	100	130	56	--	30	4.6	--
06...	--	200	--	47	--	152	42	--
07...	22	K11	180	53	0	25	4.6	--
07...	48	92	900	47	0	73	18	--
08...	--	84	130	55	--	32	5.4	--
08...	--	160	540	52	--	118	31	--
09...	22	58	110	54	0	52	9.3	--
09...	46	100	260	50	0	62	13	--
10...	--	84	94	56	--	36	5.4	--
10...	--	--	--	55	--	--	--	--
14...	--	--	--	--	--	--	--	--
16...	--	K6	29	--	--	28	3.6	--
21...	--	--	--	--	--	--	--	--
28...	--	--	--	63	--	--	--	--
MAY								
02...	7	20	--	62	--	9	1.1	--
20...	--	K16	--	48	--	--	--	--
JUN								
04...	--	--	--	--	--	--	--	--
09...	8	120	--	30	0	44	17	--
11...	--	200	--	30	--	89	44	--
13...	8	70	--	32	--	48	--	--
16...	10	K13	--	30	0	37	--	--
18...	--	270	--	31	--	156	109	--
20...	19	K620	--	32	0	100	--	--
23...	--	K7	--	30	--	47	--	--
26...	--	70	--	27	--	116	--	--
27...	--	K12	--	30	--	65	--	--

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)
JUL							
01...	1500	210	75	6.7	17.0	9.0	12.1
07...	1130	307	68	6.4	19.0	8.5	11.3
SEP							
09...	1600	100	100	7.1	--	7.5	11.8
24...	1227	154	102	7.2	9.5	6.0	12.4

DATE	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUL							
01...	104	764	K15	32	0	45	26
07...	97	751	260	25	0	144	119
SEP							
09...	98	765	20	--	--	--	--
24...	99	763	--	43	0	--	--

K NON-IDEAL COLONY COUNT

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE

LOCATION.--Lat 61°12'19", long 149°53'43", on line between sec.19, R.3 W., and sec.24, R.4 W., T.13 N., Municipality of Anchorage, Hydrologic Unit 19050002, on upstream right bank wingwall of bridge on Arctic Boulevard at Anchorage.

DRAINAGE AREA.--27.2 mi^2 (70.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1966 to current year.

REVISED RECORDS.--WRD Alaska 1972: Drainage area.

GAGE.--Water-stage recorder and culvert control. Datum of gage is 16.02 ft (4.883 m) National Geodetic Vertical Datum of 1929 (from USC&GS, datum of 1968).

REMARKS.--Records fair except those for the period of no gage-height record, Nov. 30 to Feb. 28, which are poor.

AVERAGE DISCHARGE.--14 years, 17.3 ft^3/s (0.490 m^3/s), 8.64 in/yr (219 mm/yr), 12,530 acre-ft/yr (15.4 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 180 ft^3/s (5.10 m^3/s) June 27, 1979, gage height, 4.83 ft (1.472 m); minimum daily, about 1.6 ft^3/s (0.045 m^3/s) Feb. 12-14, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 114 ft^3/s (3.23 m^3/s) Aug. 16, gage height, 4.18 ft (1.274 m); minimum daily, 12 ft^3/s (0.34 m^3/s) Mar. 14-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	35	18	14	15	39	20	25	26	30	29
2	23	25	30	18	14	14	37	20	24	25	30	29
3	24	23	25	17	15	13	35	19	24	27	30	28
4	22	21	20	17	16	14	42	19	23	25	26	28
5	24	20	19	17	17	14	40	19	23	25	25	28
6	21	24	19	17	16	14	39	19	23	31	26	28
7	20	46	17	16	16	14	33	20	24	30	48	28
8	30	32	17	16	16	14	31	19	23	27	36	28
9	49	33	17	16	17	14	29	19	23	26	29	28
10	28	32	17	16	17	14	26	19	23	27	31	27
11	27	35	17	16	17	13	24	19	33	31	27	27
12	25	42	18	15	18	13	31	19	27	38	27	31
13	27	42	18	15	16	13	27	19	25	28	28	48
14	24	29	18	15	15	12	26	19	24	26	29	45
15	22	43	18	15	15	12	23	18	23	31	31	56
16	22	47	18	15	14	12	22	19	23	29	68	43
17	22	31	18	17	14	12	22	19	38	29	46	37
18	22	27	18	20	13	12	21	20	54	28	40	35
19	21	26	18	30	13	13	21	21	31	27	33	32
20	21	26	18	28	15	13	21	20	33	26	31	31
21	21	26	18	24	18	13	21	22	28	25	38	35
22	21	27	18	20	18	15	21	20	26	25	34	46
23	21	26	18	19	17	13	20	19	25	25	32	37
24	25	26	18	18	17	13	20	18	25	24	31	43
25	23	23	19	16	17	19	20	18	29	25	30	37
26	20	24	19	15	16	20	20	18	26	25	29	37
27	26	23	20	15	16	20	20	19	24	34	31	36
28	31	26	20	14	16	29	20	19	25	27	35	34
29	23	48	19	14	16	20	20	20	26	35	31	33
30	37	40	19	14	---	22	20	49	37	29	31	41
31	35	---	19	14	---	56	---	30	---	44	31	---
TOTAL	780	918	602	537	459	505	791	638	817	880	1024	1045
MEAN	25.2	30.6	19.4	17.3	15.8	16.3	26.4	20.6	27.2	28.4	33.0	34.8
MAX	49	48	35	30	18	56	42	49	54	44	68	56
MIN	20	20	17	14	13	12	20	18	23	24	25	27
CFSM	.93	1.13	.71	.64	.58	.60	.97	.76	1.00	1.04	1.21	1.28
IN.	1.07	1.26	.82	.73	.63	.69	1.08	.87	1.12	1.20	1.40	1.43
AC-FT	1550	1820	1190	1070	910	1000	1570	1270	1620	1750	2030	2070

CAL YR 1979 TOTAL 8293.0 MEAN 22.7 MAX 60 MIN 6.0 CFSM .84 IN 11.34 AC-FT 16450
WTR YR 1980 TOTAL 8996.0 MEAN 24.6 MAX 68 MIN 12 CFSM .90 IN 12.30 AC-FT 17840

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-73, 1975-77, and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
JUL												
14...	1115	26	236	--	--	11.5	12.3	110	761	--	--	--
SEP												
12...	1440	27	235	6.7	7.0	5.5	12.8	100	770	170	92	0

15276000 SHIP CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°13'25", long 149°37'55", in NE¼ sec.16, T.13 N., R.2 W., Municipality of Anchorage, Hydrologic Unit 19050002, in Fort Richardson Military Reservation, at diversion dam and Fort Richardson water-supply intake building, 3.5 mi (5.6 km) upstream from North Fork Ship Creek, and 8.5 mi (13.7 km) east of Anchorage.
DRAINAGE AREA.--90.5 mi^2 (234.4 km^2).
PERIOD OF RECORD.--October 1946 to current year.
REVISED RECORDS.--WSP 1936: Drainage area.
GAGE.--Water-stage recorder and masonry dam. Prior to May 10, 1976, spillway elevation was about 4 ft (1.2 m) lower. Datum of gage is 530 ft (161.5 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1936 for history of changes prior to Oct. 1, 1954.
REMARKS.--Records good except those for Dec. 6 to Mar. 21, which are poor. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 1980, 18.2 ft^3/s (0.52 m^3/s). Diversion began in 1944. Several observations of water temperature were made during the year.
COOPERATION.--Gage inspected and records of diversion furnished by Office of Post Engineers, Fort Richardson.
AVERAGE DISCHARGE.--34 years, 161 ft^3/s (4.560 m^3/s), 24.16 in/yr (614 mm/yr), 116,600 acre-ft/yr (144 hm^3/yr), adjusted to include diversion.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft^3/s (52.7 m^3/s) June 21, 1949, gage height, 3.44 ft (1.049 m), site and datum then in use; no flow at times.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,080 ft^3/s (30.6 m^3/s) July 12, gage height, 8.04 ft (2.451 m); minimum discharge, 8.7 ft^3/s (0.25 m^3/s) Mar. 29, but it could have been less on Mar. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	130	126	50	40	30	17	78	313	622	473	264
2	255	124	120	50	40	30	18	83	313	605	466	250
3	252	120	118	50	40	30	21	83	352	605	448	243
4	238	103	107	50	40	30	21	83	460	581	409	228
5	247	95	96	50	40	25	21	85	636	612	389	217
6	231	113	70	60	40	30	27	90	782	774	380	210
7	219	148	75	65	45	30	28	91	875	837	457	201
8	210	172	90	60	40	30	30	93	804	748	479	196
9	264	165	85	55	40	30	31	93	712	656	430	192
10	247	196	95	50	40	30	30	100	698	598	424	185
11	240	298	75	50	40	25	31	102	734	778	395	180
12	231	247	80	45	45	18	34	103	734	1020	366	178
13	222	219	80	45	45	20	33	111	670	952	352	217
14	205	174	55	45	40	25	27	113	632	793	319	235
15	196	176	40	45	35	25	28	114	622	720	303	359
16	187	180	50	45	30	30	26	122	643	670	378	516
17	185	163	60	45	25	30	24	138	698	615	383	457
18	172	146	70	50	25	30	28	165	716	575	460	383
19	157	150	70	50	30	35	31	172	619	545	476	335
20	146	146	75	50	30	30	39	174	674	562	504	300
21	140	144	80	60	35	30	44	172	592	581	507	287
22	144	159	75	65	40	27	42	174	552	571	466	274
23	142	146	70	55	40	20	35	183	555	558	421	257
24	142	132	75	40	40	20	34	192	619	548	389	262
25	142	122	85	45	35	20	40	208	706	513	366	247
26	136	114	90	45	35	20	51	228	692	494	341	247
27	136	120	85	50	30	18	68	243	664	562	324	298
28	134	128	80	45	30	17	72	262	748	656	332	287
29	128	157	70	40	30	17	72	277	716	585	305	280
30	136	138	65	35	---	15	75	298	667	562	290	332
31	144	---	55	35	---	17	---	319	---	504	277	---
TOTAL	5880	4625	2467	1525	1065	784	1078	4749	19198	20002	12309	8117
MEAN	190	154	79.6	49.2	36.7	25.3	35.9	153	640	645	397	271
MAX	264	298	126	65	45	35	75	319	875	1020	507	516
MIN	128	95	40	35	25	15	17	78	313	494	277	178
AC-FT	11660	9170	4890	3020	2110	1560	2140	9420	38080	39670	24410	16100

CAL YR 1979 TOTAL 61384 MEAN 168 MAX 742 MIN 13 AC-FT 121800
WTR YR 1980 TOTAL 81799 MEAN 223 MAX 1020 MIN 15 AC-FT 162200

ADJUSTED TO INCLUDE DIVERSION

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	207	173	97.3	69.8	56.5	45.1	54.6	171	657	661	414	288
CFSM	2.29	1.91	1.08	0.77	0.62	0.50	0.60	1.89	7.26	7.30	4.57	3.18
IN	2.64	2.13	1.24	0.89	0.67	0.57	0.67	2.17	8.10	8.42	5.27	3.55
AC-FT	12,750	10,300	5,990	4,290	3,250	2,770	3,250	10,490	39,080	40,660	25,450	17,140

CAL YR 1979 MEAN 186 CFSM 2.06 IN 27.92 AC-FT 134,700
WTR YR 1980 MEAN 242 CFSM 2.67 IN 36.35 AC-FT 175,400

15276570 SHIP CREEK BELOW POWER PLANT AT ELMENDORF AIR FORCE BASE

LOCATION.--Lat 61°13'29", long 149°50'39", in SE¼ sec.8, T.13 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank 500 ft (150 m) downstream from North Sitka Street, 0.5 mi (0.8 km) downstream from southwest corner of Elmendorf Air Force Base, and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--115 mi^2 (298 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (24 m), from topographic map. Prior to Aug. 7, 1972, at site 0.5 mi (0.8 km) upstream at different datum.

REMARKS.--Water-discharge records good. Diversions above station for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage (see station 15276000). Water also diverted for cooling of power plant and returned above station.

AVERAGE DISCHARGE.--10 years, 144 ft^3/s (4.078 m^3/s), 104.300 acre-ft/yr (129 hm^3/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,600 ft^3/s (45.3 m^3/s) Aug. 9, 1971 (estimated from records at station 15276500); minimum, 5.8 ft^3/s (0.16 m^3/s) Apr. 14, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft^3/s (34.8 m^3/s) June 12, gage height, 3.72 ft (1.134 m); minimum, 20 ft^3/s (0.57 m^3/s) Mar. 13, gage height, 0.73 ft (0.222 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	145	139	54	43	27	43	64	383	874	513	277
2	274	136	132	54	43	30	46	64	373	834	489	267
3	283	132	129	53	43	29	45	65	431	834	479	252
4	257	127	122	54	38	28	59	69	565	802	432	236
5	266	101	114	56	40	27	57	73	817	828	388	226
6	255	120	65	65	43	27	67	74	1000	1000	392	214
7	233	155	70	67	44	30	79	80	1120	1080	441	207
8	225	185	89	63	41	29	79	81	1030	955	503	198
9	283	182	87	61	40	30	81	84	1070	815	446	189
10	274	211	97	60	40	27	81	91	1060	740	437	184
11	260	322	79	60	41	27	75	94	1110	901	419	175
12	246	277	70	60	45	24	73	95	1100	1170	379	172
13	266	246	70	60	46	22	70	101	984	1090	367	211
14	221	197	38	55	40	23	65	103	928	887	342	233
15	211	204	42	55	35	26	61	106	901	784	319	342
16	201	201	51	55	30	27	57	112	887	722	384	529
17	197	180	62	55	27	27	53	125	976	658	414	489
18	187	155	70	53	25	30	51	145	1020	608	474	410
19	173	163	69	53	24	31	49	168	887	570	503	358
20	161	157	71	55	27	27	49	170	928	586	518	322
21	155	155	76	61	32	26	50	170	834	619	529	303
22	155	165	76	65	35	29	48	173	784	608	499	296
23	155	155	69	53	41	30	47	187	771	597	446	281
24	155	134	76	42	41	30	46	189	841	591	410	281
25	149	130	81	47	34	27	45	213	962	554	384	267
26	141	123	85	52	31	26	47	243	976	534	358	256
27	141	117	81	51	31	26	51	269	935	591	342	303
28	149	145	79	50	30	27	57	297	1030	698	346	315
29	138	168	73	44	29	26	62	332	997	613	326	303
30	141	162	69	36	---	28	63	354	941	559	303	334
31	155	---	59	39	---	42	---	393	---	544	292	---
TOTAL	6376	5050	2490	1688	1059	865	1756	4784	26641	23246	12874	8430
MEAN	206	168	80.3	54.5	36.5	27.9	58.5	154	888	750	415	281
MAX	283	322	139	67	46	42	81	393	1120	1170	529	529
MIN	138	101	38	36	24	22	43	64	373	534	292	172
AC-FT	12650	10020	4940	3350	2100	1720	3480	9490	52840	46110	25540	16720

CAL YR 1979 TOTAL 61435 MEAN 168 MAX 610 MIN 19 AC-FT 121900
WTR YR 1980 TOTAL 95259 MEAN 260 MAX 1170 MIN 22 AC-FT 188900

15276570 SHIP CREEK BELOW POWER PLANT AT ELMENDORF AIR FORCE BASE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to September 1980 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1971 to September 1980 (discontinued).

INSTRUMENTATION.--Temperature recorder since Oct. 19, 1970.

REMARKS.--Water temperatures at low flow are significantly increased by power plant effluent located 0.9 mi (1.4 km) upstream. Prior to August 1972, sampling site was 0.5 mi (0.8 km) upstream. Temperature at the sensor was compared with the average for the river by temperature cross-sections Feb. 29 and May 23. A maximum variation of 0.3°C was found within the cross-sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 18.0°C Aug. 15, 16, 1974; minimum, 0.0°C Jan. 13, 14, 1974, Feb. 3, 1978, and Dec. 7-15, Jan. 11-15, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 12.0°C Apr. 24, 25 and May 12; minimum, 0.0°C Dec. 7-15 and Jan. 11-15.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	PER-CENT OF TOTAL DEPTH	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)
FEB								
29...	1300	25	--	--	--	--	2.0	7.0
29...	1330	--	.0	--	--	--	--	6.9
29...	1331	--	2.5	.2	1.00	20	--	6.9
29...	1332	--	2.5	.8	1.00	80	--	6.9
29...	1333	--	7.5	.5	.90	60	--	7.0
29...	1334	--	13	.5	.80	60	--	7.1
29...	1335	--	18	.2	.90	20	--	7.2
29...	1336	--	18	.7	.90	80	--	7.2
29...	1337	--	23	.2	.40	60	--	7.2
MAY								
23...	0821	42	3.0	--	--	--	--	5.6
23...	0822	--	7.0	--	--	--	--	5.6
23...	0823	--	11	--	--	--	--	5.6
23...	0824	--	16	--	--	--	--	5.6
23...	0825	--	22	--	--	--	--	5.6
23...	0826	--	28	--	--	--	--	5.6
23...	0827	--	34	--	--	--	--	5.6
23...	0828	--	40	--	--	--	--	5.6

15276570 SHIP CREEK BELOW POWER PLANT AT ELMENDORF AIR FORCE BASE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.0	4.5	3.0	2.0	1.5	1.0	.5	2.5	1.0	6.0	2.0
2	8.0	7.0	5.0	4.0	2.0	1.5	1.0	.5	3.5	2.0	5.5	3.5
3	8.0	7.0	4.5	2.5	2.0	1.5	1.0	.5	3.5	2.5	6.5	4.5
4	8.0	7.0	2.5	2.0	2.5	2.0	1.5	.5	4.5	2.5	9.5	4.5
5	8.0	7.0	3.5	2.0	2.0	1.5	2.0	1.0	6.0	4.0	9.5	5.5
6	8.0	6.5	3.5	2.5	2.0	1.0	2.0	2.0	5.5	3.5	9.5	4.5
7	7.0	6.0	5.0	3.5	2.0	.0	2.5	2.0	4.0	2.5	9.5	6.5
8	7.0	6.5	5.0	4.5	.5	.0	2.0	1.5	4.0	2.5	7.5	6.0
9	8.0	7.0	5.0	4.5	.0	.0	2.0	.5	5.0	3.5	9.0	4.5
10	8.0	7.0	5.0	4.5	.5	.0	.5	.5	5.5	4.0	9.5	2.5
11	8.0	6.5	4.5	4.0	.0	.0	.5	.0	4.5	2.5	9.0	4.5
12	7.0	6.5	4.5	3.0	.0	.0	.0	.0	6.0	4.0	8.0	2.0
13	6.5	6.0	3.0	2.0	.0	.0	.0	.0	5.0	2.5	7.5	1.0
14	5.5	3.5	2.0	1.5	.0	.0	.0	.0	5.0	2.5	5.5	1.0
15	6.0	4.5	2.5	1.5	.5	.0	1.0	.0	5.0	2.0	5.0	2.0
16	6.5	5.0	2.5	2.0	1.0	.5	2.0	1.0	3.0	1.0	5.0	.5
17	6.0	5.0	2.0	1.5	1.0	.5	2.0	1.5	3.5	1.0	8.5	.5
18	5.5	4.0	1.5	1.5	2.0	1.0	3.0	2.0	4.0	1.5	10.0	4.5
19	4.5	3.5	1.5	1.5	2.0	1.0	3.0	2.0	6.0	.5	9.0	1.5
20	3.5	2.0	1.5	1.5	2.0	1.5	2.5	2.0	4.0	1.0	8.0	1.5
21	2.5	1.5	1.5	1.5	1.5	1.0	3.5	2.0	5.0	2.0	11.5	5.5
22	4.0	2.5	1.5	1.5	1.0	.5	5.0	1.0	5.0	3.0	9.5	4.5
23	4.0	3.0	2.0	1.5	1.0	1.0	1.5	.5	5.5	4.0	9.5	3.5
24	4.0	3.0	1.5	1.5	1.0	.5	2.0	1.0	5.5	4.0	9.5	4.5
25	4.5	3.5	1.5	1.5	1.0	1.0	2.0	1.0	6.5	4.0	10.5	4.0
26	4.5	3.5	2.0	1.0	2.5	1.0	2.0	1.0	7.0	3.0	10.0	4.5
27	4.5	3.5	2.0	1.5	2.5	1.5	3.0	2.5	7.5	5.0	9.5	5.0
28	4.0	3.0	2.5	2.0	2.0	1.0	3.5	2.5	8.0	5.0	11.5	4.0
29	4.0	3.5	3.0	2.0	1.5	1.0	2.5	1.0	7.5	4.0	8.0	2.5
30	5.5	3.5	3.0	2.0	1.5	1.0	2.5	1.0	---	---	9.0	4.5
31	4.5	3.0	---	---	1.0	.5	2.5	1.5	---	---	10.0	6.0
MONTH	8.0	1.5	5.0	1.0	2.5	.0	5.0	.0	8.0	.5	11.5	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	4.0	10.0	6.5	9.5	4.5	8.0	7.5	9.5	8.5	9.0	6.5
2	9.0	4.0	9.5	6.5	7.5	5.0	8.0	7.5	9.5	9.0	7.5	5.0
3	9.5	4.0	11.5	5.5	8.0	5.0	8.0	8.0	9.5	8.0	7.5	4.5
4	9.5	4.5	10.0	5.5	10.0	5.5	8.5	8.0	9.5	8.0	7.5	4.5
5	9.5	5.0	9.0	6.0	9.5	4.5	8.5	8.0	9.5	8.5	8.0	5.0
6	10.0	4.5	9.0	7.0	8.0	4.0	8.0	8.0	9.0	9.0	8.5	5.5
7	9.0	4.5	9.5	6.5	6.0	4.0	8.5	8.5	9.0	9.0	8.0	6.5
8	10.0	4.5	10.0	6.5	7.0	4.0	8.5	8.5	9.0	8.5	9.0	7.0
9	10.0	4.5	11.0	6.5	6.0	5.0	8.5	8.5	9.5	8.5	9.5	7.5
10	10.0	4.0	11.5	8.0	6.5	6.0	8.5	8.5	10.0	9.5	9.0	6.5
11	8.5	5.0	9.5	6.0	6.0	5.5	8.5	8.5	10.5	9.0	8.5	6.0
12	9.0	5.0	12.0	6.5	5.5	5.5	8.5	8.5	10.5	9.5	7.0	6.0
13	9.5	5.5	10.0	6.5	5.5	5.5	8.5	8.5	10.0	9.5	7.5	6.5
14	10.5	5.5	9.0	7.0	5.5	5.5	9.0	8.5	10.5	9.0	8.5	7.5
15	11.0	5.0	10.0	6.5	6.5	6.0	9.5	9.0	10.5	9.5	8.5	8.0
16	10.5	5.5	9.5	6.5	6.5	6.0	9.0	9.0	10.5	10.0	8.5	7.5
17	10.5	5.5	8.5	6.5	7.0	6.0	9.5	9.0	10.0	9.5	7.5	6.0
18	11.0	6.5	8.0	6.5	6.0	6.0	10.0	9.5	10.0	10.0	7.5	6.0
19	10.5	5.5	10.0	5.5	6.5	6.0	10.5	10.0	10.5	10.0	7.0	5.0
20	11.0	6.5	8.0	6.5	6.5	6.0	11.0	10.0	10.5	9.5	6.0	4.5
21	9.5	6.5	7.0	6.0	6.5	5.5	11.0	10.5	9.5	8.5	7.0	6.0
22	9.5	6.0	10.0	6.0	7.5	6.5	11.0	10.5	10.0	8.0	7.5	6.5
23	10.0	6.5	8.5	5.5	8.0	7.0	11.0	10.0	10.0	7.0	7.0	6.0
24	12.0	6.0	7.5	5.5	8.0	7.5	11.0	10.0	10.0	7.0	7.5	6.5
25	12.0	7.0	9.5	5.5	7.5	7.0	10.0	10.0	10.0	7.5	7.0	6.0
26	11.0	7.0	8.0	5.5	7.5	6.5	10.5	10.0	10.0	7.5	7.5	6.5
27	10.5	6.5	8.0	5.5	7.5	7.0	10.0	9.5	8.5	7.5	7.5	6.0
28	10.5	6.5	8.0	5.5	7.5	7.5	9.5	9.0	9.0	7.5	6.5	4.5
29	11.0	5.5	8.5	4.5	7.0	7.0	9.5	9.0	9.0	7.5	6.5	5.5
30	11.0	6.5	7.0	5.5	7.5	7.5	9.5	9.0	9.0	7.0	7.0	6.5
31	---	---	8.5	4.5	---	---	10.0	9.0	10.0	8.0	---	---
MONTH	12.0	4.0	12.0	4.5	10.0	4.0	11.0	7.5	10.5	7.0	9.5	4.5
YEAR	12.0	.0										

15277100 EAGLE RIVER AT EAGLE RIVER

LOCATION.--Lat 61°18'28", long 149°33'32", in NW¼ sec.13, T.14 N., R.2 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank, 800 ft (200 m) upstream from Eagle River campground, 0.6 mi (1.0 km) upstream from Glenn Highway crossing, and 1.0 mi (1.6 km) south of Eagle River.

DRAINAGE AREA.--192 mi² (497 km²), approximately.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map.

REMARKS.--Records good except those for Nov. 15 to Apr. 20, which are fair. Summer flows augmented by glaciers that cover 13 percent of the basin. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years, 528 ft³/s (14.95 m³/s), 37.35 in/yr (949 mm/yr), 382,500 acre-ft/yr (472 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,240 ft³/s (177 m³/s) Sept. 18, 1967, gage height, 9.49 ft (2.893 m); minimum daily, 24 ft³/s (0.68 m³/s) Jan. 29 to Feb. 5, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
July 7	0830	2,570	72.8	7.18	2.188	Aug. 10	0900	2,950	83.5	7.45	2.271
July 13	0130	*3,440	97.4	*7.76	2.365	Sept.16	1200	2,630	74.5	7.22	2.201
July 28	0930	3,230	91.5	7.63	2.326						

Minimum daily discharge, about 75 ft³/s (2.1 m³/s) Mar. 16-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	941	273	130	110	100	90	80	167	466	1390	2180	934
2	1020	258	130	110	100	90	90	185	466	1400	2120	838
3	878	246	130	110	100	90	90	190	505	1450	2160	718
4	724	187	130	110	100	85	90	192	615	1370	1960	630
5	784	173	130	110	100	85	90	200	941	1510	1880	590
6	808	273	130	110	100	85	100	205	1190	1980	1880	565
7	665	273	130	110	100	85	100	220	1400	2520	2240	537
8	580	270	130	110	100	85	100	231	1440	2360	2500	529
9	832	276	120	110	100	85	100	237	1350	2120	2400	592
10	1080	294	120	110	100	80	110	243	1280	1900	2890	569
11	1050	398	120	110	100	80	110	249	1360	2160	2640	500
12	850	402	120	110	100	80	120	249	1320	3130	2450	464
13	665	390	120	110	100	80	120	261	1200	3320	2060	543
14	570	285	120	110	100	80	120	267	1140	2810	1810	823
15	505	240	120	110	100	80	120	273	1090	2540	1620	1700
16	470	200	120	110	100	75	130	273	1120	2290	1690	2500
17	454	190	120	110	95	75	130	291	1230	2130	1670	2260
18	414	180	120	110	95	75	130	354	1240	2060	1740	1680
19	374	170	120	110	95	75	140	390	1120	2010	1660	1240
20	336	160	120	110	95	75	140	382	1100	2140	1700	1020
21	332	160	120	110	95	75	140	362	1040	2380	1570	881
22	318	150	120	110	95	75	151	336	990	2390	1350	807
23	309	150	120	110	95	75	155	350	983	2380	1210	750
24	306	140	120	110	95	75	145	354	1140	2540	1150	714
25	297	140	120	110	90	75	141	362	1270	2420	1070	685
26	279	140	120	110	90	75	145	402	1420	2390	1030	668
27	273	140	120	110	90	75	151	422	1390	2660	1000	1330
28	273	140	120	110	90	75	153	430	1550	3130	990	1080
29	264	130	120	100	90	75	157	446	1560	2910	1010	840
30	282	130	120	100	---	75	161	450	1480	2590	906	910
31	300	---	120	100	---	80	---	458	---	2330	906	---
TOTAL	17233	6558	3800	3380	2810	2465	3709	9431	34396	70710	53442	27897
MEAN	556	219	123	109	96.9	79.5	124	304	1147	2281	1724	930
MAX	1080	402	130	110	100	90	161	458	1560	3320	2890	2500
MIN	264	130	120	100	90	75	80	167	466	1370	906	464
CFSM	2.90	1.14	.64	.57	.51	.41	.65	1.58	5.97	11.9	8.98	4.84
IN.	3.34	1.27	.74	.65	.54	.48	.72	1.83	6.66	13.70	10.35	5.41
AC-FT	34180	13010	7540	6700	5570	4890	7360	18710	68220	140300	106000	55330

CAL YR 1979 TOTAL 240923 MEAN 660 MAX 3710 MIN 60 CFSM 3.44 IN 46.68 AC-FT 477900
WTR YR 1980 TOTAL 235831 MEAN 644 MAX 3320 MIN 75 CFSM 3.35 IN 45.69 AC-FT 467800

NOTE.--No gage-height record Nov. 28 to Apr. 20.

15277410 PETERS CREEK NEAR BIRCHWOOD

LOCATION.--Lat 61°25'08", long 149°29'20", in NW¼SE¼ sec.5, T.15 N., R.1 W., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank at Alaska Railroad bridge, 0.5 mi (0.8 km) downstream from unnamed tributary, 0.8 mi (1.3 km) upstream from mouth, and 1.0 mi (1.6 km) north of Birchwood. Prior to October 18, 1979, at site 50 ft (15 m) upstream.

DRAINAGE AREA.--87.8 mi^2 (227.4 km^2).

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 75 ft (22.9 m), from topographic map. Prior to October 18, 1979 at site 50 ft (15 m) upstream at same datum.

REMARKS.--Records fair except those for Dec. 7 to Feb. 3, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--7 years, 116 ft^3/s (3.285 m^3/s), 17.94 in/yr (456 mm/yr), 84,040 acre-ft/yr (104 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft^3/s (34.0 m^3/s) Sept. 16, 1980, gage height, 5.73 ft (1.746 m); maximum gage height, 10.37 ft (3.161 m) Jan. 7, 1978, site then in use, backwater from ice; minimum discharge, 10 ft^3/s (0.28 m^3/s) Feb. 16, 1977, gage height, 3.72 ft (1.134 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,200 ft^3/s (34.0 m^3/s) Sept. 16, gage height, 5.73 ft (1.746 m); minimum daily, 25 ft^3/s (0.71 m^3/s) Mar. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	94	86	59	45	33	28	43	104	400	508	328
2	148	94	86	58	44	36	29	46	108	438	502	314
3	145	88	83	58	44	35	30	46	106	460	478	289
4	135	78	75	57	43	35	31	46	122	438	443	302
5	135	73	76	56	35	35	33	48	174	520	410	246
6	138	98	78	56	45	35	33	50	297	670	421	225
7	128	102	76	56	44	34	32	51	365	585	443	215
8	122	98	72	55	44	34	35	50	380	514	466	208
9	152	96	72	55	45	33	36	52	346	472	478	202
10	165	112	71	54	42	32	36	54	319	438	460	192
11	158	125	70	54	44	32	34	56	346	545	438	186
12	148	125	70	53	44	32	36	58	337	678	410	186
13	138	127	69	53	41	32	35	63	293	663	385	211
14	122	100	68	52	42	32	34	63	281	545	365	261
15	120	110	68	52	40	32	33	64	273	533	332	581
16	120	112	67	51	40	32	33	67	289	526	355	658
17	125	94	67	50	40	32	33	72	306	532	427	370
18	127	80	66	50	40	32	35	70	323	565	443	246
19	123	100	66	49	40	32	36	73	306	558	478	208
20	116	96	65	49	40	31	38	75	306	558	478	186
21	116	92	64	49	39	31	41	72	306	599	472	166
22	116	104	64	48	39	30	38	75	289	565	460	150
23	114	92	64	48	39	30	37	75	306	606	385	134
24	114	76	63	48	38	29	36	76	337	599	346	125
25	110	76	62	47	39	28	37	76	406	599	337	116
26	106	73	62	47	37	28	39	81	416	634	323	114
27	104	73	62	47	37	27	41	86	370	670	306	140
28	100	88	61	46	37	28	43	88	416	686	306	127
29	98	108	60	45	35	28	44	92	421	520	297	120
30	100	92	60	45	---	25	43	94	400	472	285	116
31	98	---	59	45	---	29	---	101	---	489	302	---
TOTAL	3876	2876	2134	1592	1182	974	1069	2063	9048	17077	12539	6922
MEAN	125	95.9	68.8	51.4	40.8	31.4	35.6	66.5	302	551	404	231
MAX	165	127	88	59	45	36	44	101	421	686	508	658
MIN	98	73	59	45	35	25	28	43	104	400	285	114
CFSM	1.42	1.09	.78	.59	.47	.36	.41	.76	3.44	6.28	4.60	2.63
IN.	1.64	1.22	.90	.67	.50	.41	.45	.87	3.83	7.24	5.31	2.93
AC-FT	7690	5700	4230	3160	2340	1930	2120	4090	17950	33870	24870	13730

CAL YR 1979 TOTAL 53480 MEAN 147 MAX 545 MIN 23 CFSM 1.67 IN 22.66 AC-FT 106100
WTR YR 1980 TOTAL 61352 MEAN 168 MAX 686 MIN 25 CFSM 1.91 IN 25.99 AC-FT 121700

15281000 KNIK RIVER NEAR PALMER

LOCATION.--Lat 61°30'18", long 149°01'50", in NE¼SE¼ sec.2, T.16 N., R.2 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, near right bank on downstream side of bridge on Old Glenn Highway, 7 mi (11 km) south of Palmer, 7 mi (11 km) upstream from Alaska Railroad bridge, 9 mi (14 km) downstream from Friday Creek, and about 17 mi (27 km) downstream from Knik Glacier.

DRAINAGE AREA.--1,180 mi^2 (3,060 km^2), approximately.

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR AK-77-1: 1974-75 (M).

GAGE.--Water-stage recorder. Datum of gage is 30.2 ft (9.20 m) National Geodetic Vertical Datum of 1929. Prior to June 27, 1960, nonrecording gage, and June 27, 1960 to Apr. 25, 1974, water-stage recorder at old bridge 100 ft (30 m) upstream at present datum. Apr. 26, 1974 to Apr. 18, 1976, nonrecording gage at site 0.4 mi (0.6 km) upstream at different datum.

REMARKS.--Records good except those for Dec. 3 to Apr. 15, which are poor. Flood peaks due to outbreak of Lake George, 1948-62, 1964, 1965, published in WSP 1936. Streamflow augmented by glaciers, which cover 54 percent of the basin.

AVERAGE DISCHARGE.--21 years, 6,892 ft^3/s (195.2 m^3/s), 79.33 in/yr (2,015 mm/yr), 4,993,000 acre-ft/yr (6.16 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355,000 ft^3/s (10,100 m^3/s) July 26, 1961, gage height, 24.3 ft (7.41 m), caused by release of stored water (Lake George) behind Knik Glacier; maximum gage height, 24.35 ft (7.422 m) July 17, 1960; minimum daily discharge, about 260 ft^3/s (7.4 m^3/s) Mar. 1-31, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1948, 359,000 ft^3/s (10,200 m^3/s) July 18, 1958, stage, 25.30 ft (7.711 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,600 ft^3/s (923 m^3/s) Aug. 12, gage height, 11.31 ft (3.447 m); minimum daily, about 750 ft^3/s (21 m^3/s) Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7630	3730	4120	760	800	800	940	2100	6400	16700	23900	11500
2	7480	3320	3800	760	800	800	960	2410	7390	16600	23600	10700
3	7660	2970	2800	750	820	780	960	2500	8580	17200	22300	9140
4	7930	2500	2300	760	830	780	960	2550	9300	16600	21300	8080
5	7840	2200	2000	780	850	780	960	2390	10800	17200	20900	6940
6	6880	2100	1700	780	850	780	960	2410	11800	19000	21300	6520
7	5450	2680	1500	780	840	780	960	2680	13100	21000	22900	6610
8	7060	3130	1300	780	820	780	960	2740	12800	22200	22100	6670
9	7510	3460	1100	780	800	780	960	2770	13200	23600	22900	7840
10	7120	3490	1000	780	800	780	960	2950	13700	22700	27000	8050
11	7390	4150	950	780	800	780	980	3200	14400	23800	31000	7240
12	7060	4300	900	780	800	780	980	3370	14200	26300	31900	6790
13	5420	3950	870	800	800	780	980	3370	13700	26900	29000	7630
14	4420	3410	850	820	800	770	980	3530	13600	27700	23700	9540
15	5740	3100	830	820	800	770	980	3650	12900	27800	21700	12300
16	6010	3500	820	820	800	770	1010	3630	13800	26000	20600	17200
17	4700	2800	820	800	800	770	984	3880	14600	24500	19000	16700
18	4000	2600	800	800	800	780	1010	4250	14200	23800	19200	16900
19	3020	2400	800	780	800	800	1040	4880	13400	23700	18300	15200
20	2660	2300	800	780	800	840	1080	4850	14000	24300	17200	13400
21	2860	2200	800	780	800	860	1230	4620	13200	25300	15900	11900
22	3110	2100	800	780	800	900	1440	4500	13200	25600	13600	11100
23	2830	1900	800	780	800	920	1520	4750	13400	26100	12500	9980
24	3040	1700	820	780	800	940	1340	4920	14400	27600	12300	9420
25	2990	1600	840	800	800	940	1230	5100	15800	26700	12300	8820
26	2630	1500	850	800	800	940	1470	5650	15700	26900	12300	8660
27	2500	1700	840	800	800	940	1560	5420	16400	28900	12100	11000
28	2410	2400	820	800	800	940	1750	5590	17800	29600	12100	11300
29	2410	5080	800	800	800	940	2000	6040	17800	27900	11700	10700
30	2920	5450	780	800	---	940	1980	6400	17900	25100	11300	11900
31	4400	---	760	800	---	940	---	6340	---	24800	11500	---
TOTAL	155080	87720	38970	24410	23410	25880	35124	123440	401470	742100	597400	309730
MEAN	5003	2924	1257	787	807	835	1171	3982	13380	23940	19270	10320
MAX	7930	5450	4120	820	850	940	2000	6400	17900	29600	31900	17200
MIN	2410	1500	760	750	800	770	940	2100	6400	16600	11300	6520
CFSM	4.24	2.48	1.07	.67	.68	.71	.99	3.38	11.3	20.3	16.3	8.75
IN.	4.89	2.77	1.23	.77	.74	.82	1.11	3.89	12.66	23.39	18.83	9.76
AC-FT	307600	174000	77300	48420	46430	51330	69670	244800	796300	1472000	1185000	614300

CAL YR 1979 TOTAL 2867548 MEAN 7856 MAX 57200 MIN 520 CFSM 6.66 IN 90.40 AC-FT 5688000
WTR YR 1980 TOTAL 2564734 MEAN 7007 MAX 31900 MIN 750 CFSM 5.94 IN 80.85 AC-FT 5087000

NOTE.--No gage-height record Dec. 8 to Mar. 23.

15290000 LITTLE SUSITNA RIVER NEAR PALMER

LOCATION.--Lat 61°42'32", long 149°13'36", in NW¼ sec.26, T.19 N., R.1 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 40 ft (12 m) downstream from highway bridge on Wasilla-Fishhook Road, 1.5 mi (2.4 km) north of road junction, 1.8 mi (2.9 km) downstream from unnamed tributary, and 8 mi (13 km) northwest of Palmer.

DRAINAGE AREA.--61.9 mi^2 (160.3 km^2).

PERIOD OF RECORD.--July 1948 to current year. Low-flow records not equivalent prior to January 1962, because most measurements below 300 ft^3/s (8 m^3/s) were made at site 3.4 mi (5.6 km) downstream.

GAGE.--Water-stage recorder. Datum of gage is 918.6 ft (279.99 m) National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Aug. 16, 1948, nonrecording gage and Aug. 17, 1948 to May 15, 1972, water-stage recorder on left bank. Prior to Oct. 1, 1974, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair except those for May, August, and September, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years, 206 ft^3/s (5.834 m^3/s), 45.19 in/yr (1,148 mm/yr), 149,200 acre-ft/yr (184 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,840 ft^3/s (222 m^3/s) Aug. 10, 1971, gage height, 9.84 ft (2.999 m) in gage well, 12.30 ft (3.749 m), top of needle peak in gage well, about 13 ft (4.0 km) from floodmarks, present datum, from rating curve extended above 4,600 ft^3/s (130 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, about 8 ft^3/s (0.23 m^3/s) Apr. 1-20, 1956 and Mar. 11, 12, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft^3/s (34 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
June 6	1400	1,640	46.4	6.53	1.990	Aug. 20	Unknown	1,570	44.5	6.42	1.957
July 11	1200	1,440	40.8	6.16	1.878	Sept.15	Unknown	*3,440	97.4	*8.92	2.719
July 28	0630	2,640	74.8	7.93	2.417						

Minimum discharge, 17 ft^3/s (0.48 m^3/s) Apr. 15, gage height, 1.36 ft (0.415 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	109	85	47	33	26	24	28	389	754	950	330
2	183	105	84	46	33	26	24	28	401	815	800	300
3	190	103	81	45	33	26	24	29	475	875	700	270
4	180	94	78	45	32	26	24	29	843	810	620	250
5	231	96	78	45	32	26	24	29	1320	840	550	230
6	203	108	76	44	31	26	26	29	1460	1030	500	220
7	187	131	76	43	30	26	25	30	1420	975	540	200
8	198	172	74	42	30	26	25	30	1220	810	560	190
9	464	163	68	42	30	25	26	30	1160	726	520	180
10	404	210	66	41	30	25	27	30	1180	658	470	170
11	356	320	62	41	29	25	26	33	1120	1220	400	160
12	311	241	62	41	29	25	25	37	885	1280	370	150
13	272	189	60	40	29	25	23	40	794	1010	350	200
14	265	140	58	40	29	24	21	45	786	890	340	600
15	222	156	58	40	29	24	21	50	726	830	330	2900
16	208	147	58	40	29	24	22	60	798	770	340	1720
17	199	131	56	39	29	24	22	80	865	782	390	1300
18	185	118	56	39	28	24	22	100	820	726	480	1000
19	174	121	56	39	28	24	24	150	650	762	700	850
20	158	115	56	39	28	24	27	250	702	758	1100	700
21	153	109	54	39	28	24	29	230	622	770	900	600
22	150	106	54	38	28	23	27	230	587	742	800	480
23	147	100	54	37	28	23	25	220	650	714	750	400
24	139	99	52	37	28	23	24	230	718	750	650	340
25	137	121	52	36	28	23	24	250	758	666	560	303
26	132	115	52	35	28	23	25	290	855	1060	493	280
27	129	121	50	35	27	23	25	330	930	1300	446	260
28	123	102	50	34	27	23	26	400	955	2090	457	240
29	116	96	49	34	27	23	26	460	895	1340	413	220
30	123	86	49	33	---	25	27	493	905	1040	380	200
31	123	---	48	33	---	25	---	457	---	1030	360	---
TOTAL	6251	4024	1912	1229	850	759	740	4727	25889	28823	17219	15243
MEAN	202	134	61.7	39.6	29.3	24.5	24.7	152	863	930	555	508
MAX	464	320	85	47	33	26	29	493	1460	2090	1100	2900
MIN	116	86	48	33	27	23	21	28	389	658	330	150
CFSM	3.26	2.17	1.00	.64	.47	.40	.40	2.46	13.9	15.0	8.97	8.21
IN.	3.76	2.42	1.15	.74	.51	.46	.44	2.84	15.56	17.32	10.35	9.16
AC-FT	12400	7980	3790	2440	1690	1510	1470	9380	51350	57170	34150	30230

CAL YR 1979 TOTAL 100420 MEAN 275 MAX 1730 MIN 20 CFSM 4.44 IN 60.35 AC-FT 199200
WTR YR 1980 TOTAL 107666 MEAN 294 MAX 2900 MIN 21 CFSM 4.75 IN 64.70 AC-FT 213600

NOTE.--No gage-height record Apr. 25 to May 29.

15291000 SUSITNA RIVER NEAR DENALI

LOCATION.--Lat 63°06'14", long 147°30'57", in NE¼ sec.10, T.21 S., R.1 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on upstream right pier of bridge on Denali Highway, 0.2 mi (0.3 km) downstream from Windy Creek, 3.3 mi (5.3 km) upstream from Butte Creek, and 5.3 mi (8.5 km) southwest of Denali.

DRAINAGE AREA.--950 mi^2 (2,460 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1957 to September 1966, July 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,440 ft (744 m), from topographic map. See WSP 2136 for history of changes prior to July 4, 1968. July 4, 1968 to Aug. 28, 1974, on left upstream wingwall, at present datum.

REMARKS.--Water-discharge records fair except those for the period of no gage-height record, Oct. 19 to May 14, which are poor. Streamflow augmented by glaciers, which cover 25 percent of the basin.

AVERAGE DISCHARGE.--21 years (water years 1958-66, 1969-80), 2,732 ft^3/s (77.37 m^3/s), 39.05 in/yr (992 mm/yr), 1,979,000 acre-ft/yr (2.44 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,200 ft^3/s (1,080 m^3/s) Aug. 10, 1971, gage height, 13.32 ft (4.060 m) from rating curve extended above 19,000 ft^3/s (540 m^3/s); maximum gage height, 13.58 ft (4.139 m) May 11, 1970, backwater from ice; minimum daily discharge, about 34 ft^3/s (0.96 m^3/s) Mar. 16-31, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 14 or 15, 1967 reached a stage of 12.7 ft (3.87 m), from floodmarks, discharge, 28,200 ft^3/s (799 m^3/s), from rating curve extended above 19,000 ft^3/s (540 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 14,000 ft^3/s (400 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 13	1130	14,400	408	11.76	3.584	Aug. 13	0930	14,100	399	11.44	3.487
July 28	1500	*24,300	688	*12.43	3.789						

Minimum daily discharge, about 260 ft^3/s (7.4 m^3/s) Mar. 29 to Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2310	1200	650	440	340	320	260	400	3430	8400	8260	3220
2	2340	1100	600	440	340	320	260	450	2890	9500	7280	2720
3	2490	1100	600	440	340	300	260	500	3010	10100	6380	2180
4	2550	1000	600	440	340	300	260	600	3740	9100	6800	1800
5	2490	1000	600	440	340	300	260	700	5960	9820	7040	1700
6	2520	1000	600	440	340	300	260	800	8260	10600	7520	1700
7	2340	1000	600	420	340	300	260	1000	9180	11300	8050	1650
8	2230	950	600	420	340	300	260	1100	8820	12000	11100	1700
9	3110	1000	550	420	340	300	260	1300	7520	11500	9740	1860
10	3700	1100	550	420	340	300	260	1500	7220	10800	8890	2260
11	3370	1200	550	420	340	300	260	1800	6980	11000	10500	2230
12	3160	1100	550	400	340	300	260	2100	6380	12800	11700	2000
13	2830	1000	550	400	340	300	260	2400	5800	13700	12800	2000
14	2600	900	550	400	340	300	260	2200	5800	12700	10800	2660
15	2390	800	550	400	340	300	260	2210	6200	11300	9100	5540
16	2260	800	550	400	320	300	280	2210	6500	10900	8120	6500
17	2210	800	500	380	320	280	280	2420	6980	12900	6920	4620
18	2100	800	500	380	320	280	280	2310	8050	12700	8050	3460
19	2000	750	500	380	320	280	280	2080	6920	11800	7910	2920
20	1900	750	500	380	320	280	280	2100	5800	11200	7280	2660
21	1800	750	500	380	320	280	280	1830	5750	11300	5850	2390
22	1700	750	500	360	320	280	280	1650	4620	10900	4620	2470
23	1600	700	500	360	320	280	300	1670	4820	10900	4420	2630
24	1500	700	480	360	320	280	300	1780	4900	11200	4260	2630
25	1500	700	480	360	320	280	300	1950	5450	11900	4300	2440
26	1500	700	480	360	320	280	300	2290	6500	11700	4300	2160
27	1400	700	480	360	320	280	300	2720	7840	14500	4060	2360
28	1400	650	460	360	320	280	300	3310	8960	22700	4340	2440
29	1300	700	460	360	320	260	350	3430	9500	15600	4220	2160
30	1300	650	460	360	---	260	400	3610	8610	10200	4060	2230
31	1200	---	460	360	---	260	---	4140	---	9260	3520	---
TOTAL	67100	26350	16510	12240	9580	8980	8410	58560	192390	364280	222190	79290
MEAN	2165	878	533	395	330	290	280	1889	6413	11750	7167	2643
MAX	3700	1200	650	440	340	320	400	4140	9500	22700	12800	6500
MIN	1200	650	460	360	320	260	260	400	2890	8400	3520	1650
CFSM	2.28	.92	.56	.42	.35	.31	.30	1.99	6.75	12.4	7.54	2.78
IN.	2.63	1.03	.65	.48	.38	.35	.33	2.29	7.53	14.26	8.70	3.10
AC-FT	133100	52270	32750	24280	19000	17810	16680	116200	381600	722500	440700	157300

CAL YR 1979 TOTAL 1168830 MEAN 3202 MAX 12500 MIN 200 CFSM 3.37 IN 45.77 AC-FT 2318000
WTR YR 1980 TOTAL 1065880 MEAN 2912 MAX 22700 MIN 260 CFSM 3.07 IN 41.74 AC-FT 2114000

15291000 SUSITNA RIVER NEAR DENALI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-66, 1968-69, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1974 to September 1980 (seasonal records) discontinued.

INSTRUMENTATION.--Temperature recorder since Aug. 29, 1974.

REMARKS.--No record Nov. 11 to May 12, when temperature sensor froze in ice. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross-sections on May 22, June 24, July 22, and Aug. 26. A maximum variation of 3.8°C was found within the cross sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 12.0°C June 4-5, 1980; minimum, 0.0°C on most days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 12.0°C June 4-5; minimum, 0.0°C on most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	PER- CENT OF TOTAL DEPTH	TEMPER- ATURE, WATER (DEG C)
MAY						
22...	1301	.0	--	--	60	4.3
22...	1302	55	--	--	60	4.5
22...	1303	495	--	--	60	4.5
22...	1304	695	--	--	60	4.8
22...	1305	795	--	--	60	4.7
22...	1306	915	--	--	60	4.4
22...	1307	945	--	--	60	4.5
JUN						
24...	1431	125	1.0	2.60	--	9.6
24...	1432	275	1.2	3.10	--	9.7
24...	1433	765	.8	2.10	--	9.3
24...	1434	860	1.9	4.80	--	8.0
24...	1435	910	2.5	6.20	--	8.1
JUL						
22...	1501	5.0	--	--	--	10.6
22...	1502	135	--	--	--	10.3
22...	1503	270	--	--	--	10.0
22...	1504	570	--	--	--	8.8
22...	1505	795	--	--	--	8.4
22...	1506	873	--	--	--	7.4
22...	1507	916	--	--	--	6.9
22...	1508	947	--	--	--	6.8
AUG						
26...	1101	525	--	--	--	4.4
26...	1103	735	--	--	--	4.2
26...	1105	820	--	--	--	4.3
26...	1107	900	--	--	20	3.4
26...	1108	900	--	--	80	3.4
26...	1109	930	--	--	20	3.4
26...	1110	930	--	--	80	3.4

15291000 SUSITNA RIVER NEAR DENALI--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAY 22...	1300	945	1570	--	102	432	E5	E5	E6
JUN 24...	1430	945	4900	13.5	302	4000	17	23	30
JUL 22...	1500	949	9900	--	988	26400	--	--	--
AUG 26...	1100	945	4700	4.0	428	5430	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
MAY 22...	E7	E8	9	29	37	84	98	100
JUN 24...	36	44	54	64	84	99	100	--
JUL 22...	--	--	60	--	--	--	--	--
AUG 26...	--	--	46	--	--	--	--	--

15291000 SUSITNA RIVER NEAR DENALI--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

TEMPERATURE. WATER (DEG. C). WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3.5	2.0	1.0	1.0								
2	3.5	3.0	1.0	1.0								
3	3.5	3.0	1.0	.5								
4	3.5	2.5	.5	.5								
5	3.0	3.0	.5	.0								
6	3.0	2.5	.0	.0								
7	3.0	2.0	.0	.0								
8	2.5	2.0	.0	.0								
9	3.5	2.5	.0	.0								
10	3.5	3.0	.0	.0								
11	3.0	3.0	---	---								
12	3.0	2.5	---	---								
13	2.5	1.0	---	---								
14	2.0	1.5	---	---								
15	2.0	1.5	---	---								
16	1.5	1.0	---	---								
17	1.5	1.5	---	---								
18	1.5	1.0	---	---								
19	1.0	1.0	---	---								
20	1.0	1.0	---	---								
21	1.0	1.0	---	---								
22	1.0	1.0	---	---								
23	1.0	1.0	---	---								
24	1.0	1.0	---	---								
25	1.0	1.0	---	---								
26	1.0	1.0	---	---								
27	1.0	1.0	---	---								
28	1.0	1.0	---	---								
29	1.0	1.0	---	---								
30	1.0	1.0	---	---								
31	1.0	1.0	---	---								
MONTH	3.5	1.0										

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	7.5	4.5	8.0	4.5	8.0	4.0	4.5	1.5
2			---	---	7.5	5.5	8.5	4.5	7.0	4.0	2.0	.5
3			---	---	8.5	6.0	8.0	4.5	6.5	4.0	1.5	.5
4			---	---	12.0	7.0	8.0	4.0	7.0	4.0	2.5	.0
5			---	---	12.0	7.5	7.0	4.5	7.5	3.5	3.5	1.0
6			---	---	10.5	6.5	6.5	4.5	7.0	4.5	3.5	2.0
7			---	---	9.0	6.5	6.0	4.5	5.5	3.5	4.5	2.5
8			---	---	8.0	4.5	6.5	4.0	5.0	3.5	4.5	3.5
9			---	---	8.0	4.5	5.5	3.5	6.0	4.0	5.0	3.5
10			---	---	8.0	5.5	6.0	3.5	8.0	4.0	5.0	3.0
11			---	---	5.5	4.0	6.0	4.0	7.5	4.0	4.5	2.0
12			---	---	6.5	4.0	4.5	4.0	7.0	3.5	4.5	1.5
13			2.0	.5	7.0	4.5	5.0	3.5	6.5	4.0	2.5	2.5
14			2.0	.5	7.5	4.5	6.5	3.5	4.0	3.5	3.5	2.5
15			2.5	1.0	7.0	4.5	6.5	3.5	4.0	3.5	4.0	3.5
16			4.5	1.0	9.0	4.5	5.5	3.5	5.0	3.5	4.5	3.0
17			4.0	1.5	8.5	5.0	5.5	3.5	6.5	3.5	4.5	2.0
18			3.5	1.0	5.0	2.5	7.5	4.0	6.5	4.0	3.5	1.0
19			4.5	1.5	4.0	2.5	7.5	3.5	5.5	4.0	2.5	1.0
20			4.5	2.5	4.0	3.5	7.5	4.0	5.5	4.0	2.5	1.0
21			2.5	1.5	6.5	3.5	7.5	3.0	5.5	4.0	2.0	1.5
22			6.5	1.5	10.0	5.5	7.5	3.5	7.0	3.5	1.5	1.0
23			6.5	4.5	10.0	6.0	8.0	4.0	7.5	3.5	2.0	1.5
24			6.5	4.5	9.0	6.0	7.0	4.0	7.5	4.0	2.5	1.5
25			7.0	4.5	8.5	5.5	6.5	4.0	7.0	4.5	2.5	1.5
26			9.5	5.0	9.5	5.5	6.5	3.5	6.5	3.0	3.0	2.0
27			9.5	6.0	9.5	5.5	6.0	4.0	5.5	4.0	3.5	3.5
28			9.0	6.0	7.5	5.0	5.0	3.5	5.5	3.5	3.5	2.0
29			7.5	5.5	7.5	5.0	5.0	4.5	5.5	3.5	2.0	1.0
30			7.5	5.5	5.5	4.0	7.0	4.5	5.0	3.0	2.0	1.5
31			6.0	4.0	---	---	8.0	4.5	5.0	3.5	---	---
MONTH			9.5		12.0	2.5	8.5	3.0	8.0	3.0	5.0	.0

15291200 MACLAREN RIVER NEAR PAXSON

LOCATION.--Lat 63°07'10", long 146°31'45", Matanuska-Susitna Borough, Hydrologic Unit 19050002, near left bank on downstream side of bridge on Denali Highway, 1.5 mi (2.4 km) downstream from Boulder Creek, and 34 mi (55 km) west of Paxson.

DRAINAGE AREA.--280 mi^2 (730 km^2), approximately.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,865.84 ft (873.508 m) National Geodetic Vertical Datum (Alaska Department of Public Works bench mark). See WSP 2136 for history of changes prior to Aug. 23, 1968.

REMARKS.--Records poor for period of no gage-height record prior to June 14, good thereafter. Streamflow augmented by Maclaren Glacier, which covers 19 percent of the basin. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--22 years, 977 ft^3/s (27.67 m^3/s), 47.38 in/yr (1,203 mm/yr), 707,800 acre-ft/yr (873 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,260 ft^3/s (262 m^3/s) Aug. 11, 1971, gage height, 8.24 ft (2.512 m), from rating curve extended above 5,300 ft^3/s (150 m^3/s); maximum gage height, 9.10 ft (2.774 m) in May 1964, from floodmarks, backwater from ice; minimum daily discharge, about 40 ft^3/s (1.1 m^3/s) Mar. 1-25, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft^3/s (120 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 28	1630	*5,930	168	*6.53	1.990	Aug. 8	0600	4,970	141	5.97	1.820

Minimum daily discharge, about 75 ft^3/s (2.1 m^3/s) Mar. 26 to Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	450	300	200	130	90	75	120	1700	2780	3410	1110
2	800	450	300	200	120	90	75	130	1400	2820	3000	1090
3	850	450	300	200	120	90	75	150	1500	2910	2960	928
4	900	450	280	180	120	90	75	170	1600	2810	2810	791
5	900	450	280	180	120	85	75	200	2200	2910	2810	714
6	900	400	280	180	120	85	75	220	3400	2940	2720	676
7	850	400	280	180	120	85	75	260	3600	2930	2990	646
8	800	400	280	180	110	85	75	320	3400	3120	4750	628
9	1000	400	260	180	110	85	75	400	3000	3030	4320	652
10	1200	400	260	180	110	85	75	500	2800	3000	3870	670
11	1100	420	260	180	110	85	75	700	2600	3000	3680	658
12	1000	400	260	160	110	85	75	1000	2600	3520	3470	634
13	900	380	260	160	110	85	75	1300	2400	4040	3600	700
14	800	360	260	160	110	80	75	1200	2400	3980	3120	968
15	750	360	240	160	100	80	75	1200	2510	3850	2650	1630
16	700	360	240	160	100	80	80	1200	2570	3580	2360	1840
17	700	360	240	160	100	80	80	1300	2740	3950	2100	1570
18	650	360	240	160	100	80	80	1200	3170	4040	2100	1340
19	650	340	240	160	100	80	80	1100	2790	3710	2030	1160
20	600	340	240	160	100	80	80	1000	2410	3470	2260	1040
21	600	340	220	140	95	80	85	900	2390	3350	2040	960
22	600	340	220	140	95	80	85	850	2100	3300	1760	920
23	550	320	220	140	95	80	85	900	2040	3290	1560	912
24	550	320	220	140	95	80	85	1000	2040	3320	1470	888
25	550	320	220	140	95	80	85	1100	2090	3440	1410	833
26	550	320	220	140	95	75	90	1200	2320	3410	1290	777
27	500	320	200	130	90	75	90	1300	2740	3800	1260	742
28	500	300	200	130	90	75	90	1500	2960	5670	1270	714
29	500	300	200	130	90	75	95	1700	3120	5090	1240	676
30	500	300	200	130	---	75	100	1800	2900	4480	1170	646
31	500	---	200	130	---	75	---	2000	---	4000	1130	---
TOTAL	22750	11110	7620	4970	3060	2535	2415	27920	75490	109540	76610	27513
MEAN	734	370	246	160	106	81.8	80.5	901	2516	3534	2471	917
MAX	1200	450	300	200	130	90	100	2000	3600	5670	4750	1840
MIN	500	300	200	130	90	75	75	120	1400	2780	1130	628
CFSM	2.62	1.32	.88	.57	.38	.29	.29	3.22	8.99	12.6	8.83	3.28
IN.	3.02	1.48	1.01	.66	.41	.34	.32	3.71	10.03	14.55	10.18	3.66
AC-FT	45120	22040	15110	9860	6070	5030	4790	55380	149700	217300	152000	54570

CAL YR 1979 TOTAL 345049 MEAN 945 MAX 4200 MIN 100 CFSM 3.38 IN 45.84 AC-FT 684400
WTR YR 1980 TOTAL 371533 MEAN 1015 MAX 5670 MIN 75 CFSM 3.63 IN 49.36 AC-FT 736900

15291500 SUSITNA RIVER NEAR CANTWELL

LOCATION.--Lat 62°41'55", long 147°32'42", in SE¼SE¼ sec.10, T.30 N., R.10 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank at lower end of gorge, 8 mi (13 km) east of Clarence Lake, 9.7 mi (15.6 km) downstream from Oshetna River, and 65 mi (105 km) southeast of Cantwell.

DRAINAGE AREA.--4,140 mi^2 (10,700 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1961 to September 1972, June to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 1,900 ft (580 m), from topographic map. Prior to May 29, 1980, gage on opposite bank and different datum.

REMARKS.--Water-discharge record fair. Large diurnal fluctuations at times each year caused by glacier melt at the source.

AVERAGE DISCHARGE.--11 years (water years 1962-72), 6,295 ft^3/s (178.3 m^3/s), 20.65 in/yr (524 mm/yr), 4,561,000 acre-ft/yr (5.62 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 55,000 ft^3/s (1,560 m^3/s) Aug. 10, 1971 on basis of discharge recorded at stations 15291000 and 15292000; minimum daily discharge, about 400 ft^3/s (11 m^3/s) Mar. 16-31, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 28,500 ft^3/s (807 m^3/s) July 29, gage height 8.21 ft (2.502 m); minimum, 5,490 ft^3/s (155 m^3/s) Sept. 12 and 13, gage height, 3.71 ft (1.131 m).

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	13100	23100	20500	9320
2								---	11800	20200	18200	8910
3								---	11100	19400	16700	7830
4								---	14500	18800	15900	7390
5								---	18900	17500	15600	6920
6								---	22100	17500	15100	6620
7								---	22500	17600	15200	6360
8								---	21900	19300	18200	6070
9								---	19200	20100	20400	5570
10								---	17000	19900	18400	5990
11								---	16600	18600	17400	6490
12								---	15500	18700	17600	6110
13								---	15500	20400	17700	6200
14								---	13400	21200	17600	8320
15								---	13600	20500	16900	12800
16								---	13800	20300	15500	17400
17								---	15200	21900	14800	15200
18								---	21500	23800	13200	12400
19								---	24800	22900	14200	10600
20								---	23400	20700	14000	9500
21								---	21400	19600	13900	8860
22								---	18200	19100	13800	8680
23								---	15600	18700	13500	8600
24								---	14900	18500	12500	8600
25								---	14400	18600	11600	8500
26								---	14500	18800	11000	8100
27								---	15600	19900	10600	7750
28								---	17900	24200	10400	7570
29								12000	19900	27900	10400	7390
30								12000	23400	24200	10200	7040
31								12400	---	22400	9860	---
TOTAL								---	521200	634300	460860	257090
MEAN								---	17370	20460	14870	8570
MAX								---	24800	27900	20500	17400
MIN								---	11100	17500	9860	5570
CFSM								---	4.20	4.94	3.59	2.07
IN.								---	4.68	5.70	4.14	2.31
AC-FT								---	1034000	1258000	914100	509900

15291500 SUSITNA RIVER NEAR CANTWELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-72 and 1980.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May to September 1980.

INSTRUMENTATION.--Temperature recorder since May 29, 1980.

REMARKS.--Complete daily temperature record was obtained for May 30 to September 30. The temperature sensor is near the left side of the stream approximately 200 ft (60 m) upstream from cableway from which temperature cross sections were obtained. Records at sensor represent average stream cross-sectional water temperature within 0.5°C. Variations in cross-section temperatures were 0.1°C on June 24, 0.0°C on July 22, and 0.0°C on Aug. 26.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum for period May to September, 13.0°C July 23, minimum, 2.5°C Sept. 3-5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	PER-CENT OF TOTAL DEPTH	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)
JUN							
24...	1345	405	95	20	14400	--	10.6
24...	1346	--	115	20	--	--	10.6
24...	1347	--	165	60	--	--	10.6
24...	1348	--	215	60	--	--	10.6
24...	1349	--	265	20	--	--	10.7
JUL							
22...	1230	420	--	--	19400	21.5	--
22...	1231	--	70	--	--	--	11.3
22...	1232	--	120	20	--	--	11.3
22...	1233	--	170	20	--	--	11.3
22...	1234	--	220	20	--	--	11.3
22...	1235	--	270	20	--	--	11.3
22...	1236	--	320	--	--	--	11.3
AUG							
26...	1230	395	105	--	10200	13.0	8.4
26...	1231	--	155	--	--	--	8.4
26...	1232	--	205	--	--	--	8.4
26...	1233	--	255	--	--	--	8.4

TEMPERATURE, WATER (DEG. C), MAY TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	7.0	6.0	9.5	7.0	11.0	9.0	7.0	5.0
2			---	---	7.0	6.5	12.0	9.5	10.5	9.0	5.0	3.0
3			---	---	9.0	7.0	12.0	10.0	9.5	8.0	3.0	2.5
4			---	---	11.5	7.0	11.0	8.5	11.0	9.0	3.5	2.5
5			---	---	12.5	9.0	11.5	10.5	11.5	10.0	4.0	2.5
6			---	---	12.5	9.0	11.5	11.0	12.5	11.0	5.0	3.5
7			---	---	10.5	8.5	11.5	9.5	12.5	9.5	5.5	4.0
8			---	---	10.0	8.5	9.5	9.0	9.5	8.0	6.5	5.5
9			---	---	10.0	8.0	9.5	9.0	9.0	8.0	6.0	5.0
10			---	---	10.0	9.0	9.5	9.0	10.5	8.5	7.0	5.0
11			---	---	9.5	7.0	9.5	9.0	12.0	10.5	6.0	4.5
12			---	---	7.0	6.0	9.5	9.0	12.0	10.5	5.5	4.0
13			---	---	9.0	7.0	9.5	8.5	11.5	9.0	4.5	4.0
14			---	---	9.0	8.0	10.0	8.5	9.0	7.5	4.5	4.0
15			---	---	9.5	8.5	10.5	10.0	8.0	7.5	5.5	4.5
16			---	---	10.5	8.5	10.0	9.0	8.0	7.5	6.5	6.0
17			---	---	10.5	7.5	9.5	8.0	8.5	8.0	6.5	4.5
18			---	---	7.5	4.0	10.5	8.0	8.5	8.0	5.0	4.0
19			---	---	4.5	3.5	11.5	10.0	8.5	8.0	4.0	3.5
20			---	---	5.0	4.5	12.5	10.5	8.5	8.0	4.0	3.5
21			---	---	6.5	5.0	12.5	10.5	8.0	7.5	4.0	3.5
22			---	---	9.5	6.5	12.5	10.5	7.5	7.0	4.0	3.5
23			---	---	10.5	9.5	13.0	10.5	8.5	7.5	5.0	4.0
24			---	---	11.0	10.0	12.5	11.5	9.5	8.0	4.5	4.5
25			---	---	11.0	9.5	12.5	11.0	10.0	9.0	4.5	4.0
26			---	---	11.0	9.0	11.0	9.5	9.0	8.0	4.5	4.0
27			---	---	12.0	11.0	10.5	9.0	8.5	7.5	5.0	4.5
28			---	---	12.0	10.5	9.0	7.5	8.5	7.5	5.0	4.5
29			---	---	11.0	8.5	8.0	7.5	8.5	8.0	4.5	4.0
30			7.0	6.0	8.5	7.0	9.0	8.0	8.0	7.0	4.5	4.0
31			6.0	5.0	---	---	10.0	9.0	7.0	7.0	---	---
MONTH					12.5	3.5	13.0	7.0	12.5	7.0	7.0	2.5

15292000 SUSITNA RIVER AT GOLD CREEK

LOCATION.--Lat 62°46'04", long 149°41'28", in NW¼ sec.20, T.31 N., R.2 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, near left bank under Alaska Railroad bridge, 0.1 mi (0.2 km) downstream from Gold Creek, 0.9 mi (1.4 km) north of Gold Creek railroad station, and 2.0 mi (3.2 km) downstream from Indian River.

DRAINAGE AREA.--6,160 mi^2 (15,950 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 676.50 ft (206.197 m) National Geodetic Vertical Datum of 1929. Prior to June 6, 1957, nonrecording gage at same site and datum. June 7, 1957 to June 2, 1964, water-stage recorder at site 0.3 mi (0.5 km) upstream at same datum.

REMARKS.--Water-discharge records good except those for Nov. 8 to May 14, which are poor.

AVERAGE DISCHARGE.--31 years, 9,647 ft^3/s (273.2 m^3/s), 21.27 in/yr (540 mm/yr), 6,989,000 acre-ft/yr (8.62 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,700 ft^3/s (2,570 m^3/s) June 7, 1964, gage height, 16.58 ft (5.054 m); maximum gage height observed, 24.48 ft (7.462 m) May 10, 1954, ice jam; minimum daily discharge, about 600 ft^3/s (17 m^3/s) Feb. 16-20, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 51,900 ft^3/s (1,470 m^3/s) July 29, gage height, 13.72 ft (4.182 m); minimum daily, about 1,400 ft^3/s (40 m^3/s) Feb. 15 to Apr. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7890	5180	3200	1900	1600	1400	1400	3700	21000	42400	31100	13000
2	7680	4720	3100	1900	1600	1400	1400	4000	19200	33800	27200	12700
3	7560	4500	3000	1900	1600	1400	1400	4600	17800	30900	24900	11900
4	7740	4000	2800	1900	1600	1400	1400	5000	21900	29500	23400	10900
5	7920	3640	2800	1900	1600	1400	1400	5500	32100	27200	22100	10200
6	8340	3250	2700	1900	1500	1400	1400	6500	40600	26900	21600	9700
7	8100	3580	2700	1900	1500	1400	1400	7500	42200	28700	21300	9450
8	7740	4000	2600	1900	1500	1400	1400	8500	38000	31500	22900	9140
9	9280	4800	2600	1800	1500	1400	1400	9500	32400	31200	26900	8890
10	10400	5500	2600	1800	1500	1400	1400	11000	28700	29500	25000	9000
11	12200	6200	2500	1800	1500	1400	1400	12000	28600	29600	22600	9060
12	11000	6400	2500	1800	1500	1400	1400	13000	26300	32400	22500	8920
13	10100	5600	2500	1800	1500	1400	1400	14000	23800	34200	22400	9660
14	9380	5000	2400	1800	1500	1400	1400	14500	22900	34200	24300	12000
15	8580	4800	2400	1800	1400	1400	1400	14400	23600	32500	22700	21600
16	7920	4500	2400	1700	1400	1400	1400	13600	23400	31900	21100	28000
17	7620	4200	2400	1700	1400	1400	1400	14200	23400	36100	20000	25000
18	7260	4000	2300	1700	1400	1400	1500	14000	35000	38400	20500	20100
19	6630	3900	2300	1700	1400	1400	1500	12700	41800	35800	20900	16900
20	5850	3700	2200	1700	1400	1400	1500	12200	39200	31600	21400	15100
21	5380	3600	2200	1700	1400	1400	1600	12100	34000	28600	21500	14100
22	5080	3500	2200	1700	1400	1400	1600	11400	29900	27200	21200	13800
23	5050	3400	2200	1700	1400	1400	1700	11800	26300	25900	19600	13800
24	5150	3300	2100	1600	1400	1400	1800	12900	25000	24800	18000	13700
25	5350	3300	2100	1600	1400	1400	1900	12900	24300	25100	16600	13300
26	5380	3200	2100	1600	1400	1400	2100	13800	24200	29600	15600	12600
27	5250	3300	2000	1600	1400	1400	2300	16100	25200	33200	14800	12000
28	5120	3500	2000	1600	1400	1400	2600	20100	27200	45200	14400	11600
29	5200	3600	2000	1600	1400	1400	2900	21000	31200	49700	14800	11400
30	5250	3600	2000	1600	---	1400	3300	20900	43200	40300	14700	10900
31	5250	---	2000	1600	---	1400	---	20600	---	34500	13900	---
TOTAL	226650	125770	74900	54200	42500	43400	50100	374000	872400	1012400	649900	398420
MEAN	7311	4192	2416	1748	1466	1400	1670	12060	29080	32660	20960	13280
MAX	12200	6400	3200	1900	1600	1400	3300	21000	43200	49700	31100	28000
MIN	5050	3200	2000	1600	1400	1400	1400	3700	17800	24800	13900	8890
CFSM	1.19	.68	.39	.28	.24	.23	.27	1.96	4.72	5.30	3.40	2.16
IN.	1.37	.76	.45	.33	.26	.26	.30	2.26	5.27	6.11	3.92	2.41
AC-FT	449600	249500	148600	107500	84300	86080	99370	741800	1730000	2008000	1289000	790300

CAL YR 1979 TOTAL 3610750 MEAN 9892 MAX 39300 MIN 1200 CFSM 1.61 IN 21.81 AC-FT 7162000
WTR YR 1980 TOTAL 3924640 MEAN 10720 MAX 49700 MIN 1400 CFSM 1.74 IN 23.70 AC-FT 7785000

NOTE.--No gage-height record Mar. 26 to May 13.

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-58, 1962, 1967-68, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June to September 1957, July 1974 to September 1978 (seasonal and fragmentary), October 1978 to current year (seasonal).
SUSPENDED-SEDIMENT DISCHARGE: May to September 1952, June to September 1957.

INSTRUMENTATION.--Temperature recorder since July 30, 1974.

REMARKS.--No record Dec. 1 to May 13, sensor frozen in ice. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on Oct. 17, May 14, July 2, and Aug. 19. A maximum variation of 2.0°C was found in the cross section of May 14. A maximum variation of -2.5°C was found between probe and cross section on July 2. Temperature at probe is influenced by Gold Creek, 0.1 mi (0.2 km) upstream.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded, 15.0°C July 3, 4, 1979, but may have been greater during periods of no record in prior years; minimum, 0.0°C during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 13.5°C July 23; minimum, 0.0°C during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	PER-CENT OF TOTAL DEPTH	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
OCT										
17...	1441	50	--	--	--	--	--	2.3	--	--
17...	1442	140	1.2	5.80	20	--	--	1.9	--	--
17...	1443	140	3.5	5.80	60	--	--	1.9	--	--
17...	1444	140	4.6	5.80	80	--	--	1.9	--	--
17...	1445	190	1.7	8.50	20	--	--	1.9	--	--
17...	1446	190	5.1	8.50	60	--	--	1.9	--	--
17...	1447	190	6.8	8.50	80	--	--	1.9	--	--
17...	1448	230	1.8	9.10	20	--	--	2.0	--	--
17...	1449	230	5.5	9.10	60	--	--	2.0	--	--
17...	1450	230	7.3	9.10	80	--	--	2.0	--	--
17...	1451	270	1.3	6.70	20	--	--	2.1	--	--
17...	1452	270	4.0	6.70	60	--	--	2.1	--	--
17...	1453	270	5.4	6.70	80	--	--	2.1	--	--
17...	1454	330	.9	4.60	20	--	--	2.5	--	--
17...	1455	330	2.8	4.60	60	--	--	2.5	--	--
17...	1456	330	3.7	4.60	80	--	--	2.6	--	--
MAY										
14...	1801	E50	--	--	20	--	--	5.1	--	--
14...	1802	130	--	--	20	--	--	3.3	--	--
14...	1803	130	--	--	80	--	--	3.3	--	--
14...	1804	175	--	--	20	--	--	3.2	--	--
14...	1805	175	--	--	80	--	--	3.2	--	--
14...	1806	230	--	--	20	--	--	3.3	--	--
14...	1807	230	--	--	80	--	--	3.3	--	--
14...	1808	275	--	--	20	--	--	3.3	--	--
14...	1809	275	--	--	80	--	--	3.3	--	--
14...	1810	340	--	--	20	--	--	3.7	--	--
14...	1811	340	--	--	80	--	--	3.8	--	--
14...	1812	400	--	--	20	--	--	4.0	--	--
JUL										
02...	1730	--	--	--	--	--	6.6	--	--	--
02...	1731	115	--	--	--	110	6.4	11.2	9.8	86
02...	1732	175	--	--	--	110	6.5	11.2	9.9	87
02...	1733	225	--	--	--	105	6.6	11.2	9.6	84
02...	1734	285	--	--	--	105	6.8	11.2	9.2	81
02...	1735	355	--	--	--	105	6.8	11.1	8.8	77
AUG										
19...	1701	120	--	--	--	138	7.4	9.8	12.2	111
19...	1702	180	--	--	--	135	7.3	9.8	12.2	111
19...	1703	230	--	--	--	135	7.4	9.8	12.2	111
19...	1704	280	--	--	--	135	7.4	9.7	12.2	110
19...	1705	340	--	--	--	122	7.4	9.7	12.1	109

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, AIR (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 17...	1440	374	7600	--	--	--	--	--	--	--	--
MAY 14...	1800	390	14400	--	--	--	--	--	--	--	--
JUL 02...	1730	460	34100	18.0	739	35	0	77	.11	.030	.14
AUG 19...	1700	430	21300	--	740	52	0	85	.00	.020	.00

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 17...	--	--	--	--	--	--	--	--	7	144
MAY 14...	--	--	--	--	--	--	--	--	1010	39300
JUL 02...	.050	.39	.44	.58	.200	.000	.040	.010	318	29300
AUG 19...	.010	.24	.25	.25	.120	.040	.040	.000	269	15500

DATE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT 17...	--	--	--	--	--	--	--	--	--	--
MAY 14...	--	11	16	23	32	*43	*55	*73	*93	*100
JUL 02...	21	23	28	34	41	49	61	80	97	100
AUG 19...	--	--	--	--	--	--	--	--	--	--

* VISUAL ACCUMULATION TUBE ANALYSIS

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.0	4.0	1.5	.5								
2	5.0	4.0	2.5	.5								
3	5.0	4.0	2.5	1.5								
4	5.0	4.5	2.0	1.0								
5	5.0	4.5	2.5	1.0								
6	5.0	4.0	2.5	1.5								
7	5.0	4.0	2.5	1.5								
8	4.0	3.5	2.5	.5								
9	4.5	3.5	2.5	.5								
10	5.0	4.0	2.0	1.0								
11	4.5	4.0	2.0	1.0								
12	4.5	3.5	2.0	.5								
13	3.5	2.5	1.0	.5								
14	3.0	2.5	2.5	1.0								
15	3.0	2.5	2.0	.5								
16	3.0	2.5	1.5	.5								
17	2.5	2.0	2.0	1.0								
18	2.0	1.5	2.0	1.0								
19	2.5	.5	2.5	1.0								
20	3.0	1.0	3.0	2.0								
21	2.5	.5	2.0	1.0								
22	2.5	1.0	2.0	1.0								
23	3.0	1.0	1.5	1.5								
24	3.0	1.0	1.5	1.0								
25	3.0	1.0	1.5	1.0								
26	3.0	1.0	2.0	1.0								
27	3.0	1.0	2.0	1.0								
28	3.0	1.5	2.0	1.5								
29	3.0	1.0	1.5	1.0								
30	2.5	.5	1.5	1.0								
31	2.0	1.0	---	---								
MONTH	5.0	.5	3.0	.5								

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	6.0	4.0	8.0	6.5	8.0	8.0	6.0	5.5
2			---	---	6.0	4.5	9.5	7.0	8.0	8.0	5.5	5.0
3			---	---	6.5	4.0	9.0	8.0	8.0	7.5	5.0	4.5
4			---	---	7.5	4.5	9.0	7.5	8.0	7.5	4.5	4.0
5			---	---	7.0	4.5	9.0	7.0	8.0	7.5	4.5	4.0
6			---	---	6.5	5.5	10.0	8.0	8.0	8.0	4.5	4.5
7			---	---	5.5	5.0	10.0	8.5	8.0	8.0	4.5	4.5
8			---	---	7.0	5.0	10.0	8.5	8.0	7.5	4.5	4.5
9			---	---	7.0	5.0	10.0	8.5	7.5	7.5	5.0	4.5
10			---	---	6.0	4.5	9.5	8.5	8.0	7.5	5.0	4.5
11			---	---	6.0	5.0	9.0	7.5	8.0	7.5	5.0	4.5
12			---	---	6.0	4.5	9.0	8.0	8.0	8.0	4.5	4.5
13			---	---	7.0	5.0	9.5	8.0	8.0	8.0	4.5	4.5
14			4.5	3.5	7.5	4.5	10.5	9.0	8.0	7.5	4.5	4.5
15			5.0	2.5	7.0	5.5	10.5	9.0	7.5	7.0	5.5	5.0
16			5.5	2.5	8.5	5.5	10.0	9.0	7.0	7.0	6.0	5.5
17			5.5	3.5	7.0	5.5	10.0	9.0	7.0	7.0	6.0	5.5
18			4.5	3.5	6.0	5.0	11.5	9.0	7.0	6.5	5.5	5.0
19			6.5	3.0	5.0	4.5	11.5	9.5	6.5	6.5	5.0	4.5
20			5.0	4.0	5.5	4.5	12.5	10.0	6.5	6.5	4.5	4.5
21			4.5	3.5	6.0	4.5	12.5	10.0	6.5	6.5	4.5	4.5
22			6.0	3.5	7.5	5.0	13.0	10.5	6.5	6.0	4.5	4.5
23			6.5	4.0	8.5	5.5	13.5	10.5	6.0	6.0	5.0	4.5
24			6.0	4.5	8.0	6.0	13.0	11.5	6.0	6.0	5.0	5.0
25			7.0	4.0	7.5	6.5	12.5	11.0	6.0	6.0	5.0	4.5
26			7.5	4.0	8.5	6.5	12.0	10.0	6.0	6.0	5.0	5.0
27			7.0	4.5	9.0	7.0	11.0	8.5	6.0	6.0	5.0	5.0
28			6.0	5.0	8.5	7.5	8.5	8.0	6.0	6.0	5.0	4.5
29			7.0	4.5	8.0	7.0	8.0	8.0	6.0	6.0	5.0	4.5
30			5.0	4.0	7.5	6.0	8.0	7.5	6.0	6.0	5.0	4.5
31			5.0	4.0	---	---	8.0	8.0	6.0	6.0	---	---
MONTH			7.5		9.0	4.0	13.5	6.5	8.0	6.0	6.0	4.0

15292400 CHULITNA RIVER NEAR TALKEETNA

LOCATION.--Lat 62°33'31", long 150°14'02", in SE¼ sec.32, T.29 N., R.5 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank, 0.5 mi (0.8 km) downstream from Parks Highway bridge, 4.5 mi (7.2 km) downstream from Troublesome Creek, 18 mi (29 km) upstream from mouth, and 16 mi (26 km) northwest of Talkeetna.

DRAINAGE AREA.--2,570 mi² (6,660 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1958 to September 1972 and annual maximum, water years 1973-77, 1979. May to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft (152 m), from topographic map. Prior to July 30, 1964, at site 3 mi (5 km) downstream at different datum. Oct. 1, 1972 to Apr. 30, 1980, crest-stage gage at site 150 ft (46 m) upstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years (water years 1959-72), 8,748 ft³/s (247.7 m³/s), 46.19 in/yr (1,173 mm/yr), 6,338,000 acre-ft/yr (7.81 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,900 ft³/s (2,150 m³/s) July 20, 1967, gage height, 22.48 ft (6.852 m); minimum daily, about 650 ft³/s (18 m³/s) Apr. 1-15, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 59,000 ft³/s (1,670 m³/s) July 28, gage height, 18.26 ft (5.566 m); minimum daily, 4,200 ft³/s (119 m³/s) May 1.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								4200	17300	29800	32500	12100
2								4400	15600	28800	26900	10800
3								4600	15000	28600	24800	9270
4								5000	16800	27400	24100	7980
5								5200	20700	26600	23300	7480
6								5500	23300	27700	24600	7260
7								5800	28900	30900	29600	7070
8								6000	27100	30800	27300	7040
9								6400	24100	30300	24700	7200
10								6560	23100	28600	23800	7220
11								6960	24800	31400	24300	7110
12								6780	23600	38800	24600	7040
13								6900	21800	39100	24800	7900
14								7070	21800	39000	22700	9210
15								7660	22300	36700	19900	12000
16								8290	21700	35700	19000	12900
17								8940	21600	39900	19000	11100
18								8920	23600	38100	26000	9850
19								8890	24900	37000	22000	9010
20								9800	23600	35100	20000	8550
21								10700	22600	35500	18000	8170
22								9930	19400	35400	17000	7810
23								10300	18900	35200	16000	7370
24								10900	19800	35100	15000	7070
25								10700	22200	34600	13500	6700
26								12000	23600	36100	13200	6580
27								12800	24300	43100	12800	6580
28								15500	25700	55800	12300	6440
29								17800	26300	44800	13300	6080
30								18900	30200	35800	16600	6300
31								20000	---	31700	12700	---
TOTAL								283400	674600	1083400	644300	247190
MEAN								9142	22490	34950	20780	8240
MAX								20000	30200	55800	32500	12900
MIN								4200	15000	26600	12300	6080
CFSM								3.56	8.75	13.6	8.09	3.21
IN.								4.10	9.76	15.68	9.33	3.58
AC-FT								562100	1338000	2149000	1278000	490300

15292400 CHULITNA RIVER NEAR TALKEETNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1967-72, and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	PER- CENT OF TOTAL DEPTH	TEMPER- ATURE, WATER (DEG C)
JUN				
03...	1531	76	20	6.8
03...	1532	76	80	6.8
03...	1533	116	20	6.8
03...	1534	116	80	6.8
03...	1535	146	20	6.6
03...	1536	146	80	6.7
03...	1537	166	20	6.7
03...	1538	166	80	6.7
03...	1539	196	20	6.8
03...	1540	196	80	6.8
23...	1515	--	--	7.0
JUL				
17...	1548	32	20	7.9
17...	1549	32	80	7.7
17...	1550	82	20	7.6
17...	1551	82	80	7.5
17...	1552	137	20	7.3
17...	1553	137	80	7.3
17...	1554	174	20	7.0
17...	1555	174	80	7.1
17...	1556	206	20	6.7
17...	1557	206	80	6.7
17...	1558	257	20	6.1
17...	1559	257	80	6.1
SEP				
01...	1731	35	--	6.2
01...	1733	70	--	6.0
01...	1735	120	--	5.9
01...	1737	145	--	5.7
01...	1739	170	--	5.6
01...	1741	195	--	5.6
01...	1743	235	--	5.6
30...	1515	--	--	8.0

DATE	TIME	STREAM WIDTH (FT)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE, AIR (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAY									
21...	1600	--	11400	E6.0	512	15800	8	10	14
JUN									
03...	1530	290	16400	12.5	438	19400	20	25	31
23...	1515	298	19000	18.5	90	4620	47	62	79
JUL									
17...	1600	332	40500	12.5	2020	221000	--	E26	E38
SEP									
01...	1730	267	12800	3.5	283	9780	--	--	--
30...	1515	240	6970	4.5	150	2820	25	31	41

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
MAY								
21...	18	23	30	37	50	73	93	99
JUN								
03...	36	42	48	56	69	89	98	100
23...	92	96	97	98	99	99	100	--
JUL								
17...	E50	E63	*E72	*E82	*E93	*E98	*E100	--
SEP								
01...	--	--	88	--	--	--	--	--
30...	49	55	60	65	76	93	99	100

* VISUAL ACCUMULATION TUBE ANALYSIS
E ESTIMATED

15292700 TALKEETNA RIVER NEAR TALKEETNA
(Hydrologic bench-mark station)

LOCATION.--Lat 62°20'49", long 150°01'01", in NE¼ sec.16, T.26 N., R.4 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 1.7 mi (2.7 km) downstream from Chunilna Creek, 3.5 mi (5.6 km) northeast of Talkeetna, and about 5 mi (8 km) above mouth.

DRAINAGE AREA.--2,006 mi² (5,196 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (120 m), from topographic map.

REMARKS.--Water-discharge records fair except those for periods of no gage-height record, Nov. 14 to May 14 and May 26 to July 2, which are poor.

AVERAGE DISCHARGE.--16 years, 4,050 ft³/s (114.7 m³/s), 27.42 in/yr (696 mm/yr), 2,934 acre-ft/yr (3.62 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,400 ft³/s (1,910 m³/s) Aug. 10, 1971, gage height, 16.35 ft (4.983 m); minimum daily, about 380 ft³/s (10.8 m³/s) Feb. 21 to Apr. 10, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34,500 ft³/s (977 m³/s) July 28, gage height, 11.71 ft (3.569 m); minimum daily, about 700 ft³/s (20 m³/s) Feb. 19 to Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3650	2340	1000	850	800	700	700	2100	8500	14000	12700	4250
2	3630	2190	950	850	800	700	700	2200	8000	12000	11000	3990
3	3650	2110	950	850	800	700	700	2300	8500	11600	9720	3670
4	3590	1700	950	850	800	700	750	2400	9500	10400	8840	3470
5	3630	1300	900	850	800	700	750	2500	11000	10200	8170	3300
6	4980	1060	900	800	800	700	800	2600	13000	10000	8200	3200
7	4300	1330	850	800	750	700	800	2800	14000	12100	8800	3000
8	4030	1970	850	800	750	700	800	3000	12000	14800	9080	2900
9	5530	2340	850	800	750	700	800	3000	12000	12700	8080	2800
10	6700	2520	850	800	750	700	800	3000	12000	11200	7660	2700
11	5380	3450	850	800	750	700	800	3200	12000	16300	7600	2700
12	4920	3430	850	800	750	700	800	3500	11000	19000	7030	3000
13	3550	2960	850	800	750	700	800	4000	11000	17600	7330	3830
14	3230	2340	850	800	750	700	800	4000	11000	15400	6910	5830
15	3350	2000	850	800	750	700	800	4320	11000	14500	6340	14600
16	3550	1800	850	800	750	700	800	4850	11000	13400	6550	18600
17	3110	1600	850	800	750	700	850	5100	12000	16400	6550	11600
18	3000	1400	850	800	750	700	850	4920	12000	15400	8440	8640
19	2760	1300	850	800	700	700	900	4600	12000	13600	8020	7360
20	2480	1200	850	800	700	700	950	5250	11000	11800	7540	6130
21	2260	1100	850	800	700	700	1000	5450	10000	10800	7330	5680
22	2340	1000	850	800	700	700	1200	5200	9500	10600	6850	5450
23	2430	1000	850	800	700	700	1200	5770	9500	10200	6130	5280
24	2390	1000	850	800	700	700	1200	6220	10000	10000	5590	5020
25	2400	1000	850	800	700	700	1300	6220	11000	10100	5220	4720
26	2260	1100	850	800	700	700	1600	6500	12000	12400	4980	4450
27	2270	1300	850	800	700	700	1900	7500	13000	17500	4720	4210
28	2290	1400	850	800	700	700	1900	8000	14000	29500	4950	4050
29	2200	1200	850	800	700	700	1900	9000	15000	19300	4780	3870
30	2290	1100	850	800	---	700	2000	10000	15000	14600	4500	3750
31	2600	---	850	800	---	700	---	10000	---	13400	4320	---
TOTAL	104750	51540	26900	25050	21500	21700	31150	149500	341500	430800	223930	162050
MEAN	3379	1718	868	808	741	700	1038	4823	11380	13900	7224	5402
MAX	6700	3450	1000	850	800	700	2000	10000	15000	29500	12700	18600
MIN	2200	1000	850	800	700	700	700	2100	8000	10000	4320	2700
CFSM	1.68	.86	.43	.40	.37	.35	.52	2.40	5.67	6.93	3.60	2.69
IN.	1.94	.96	.50	.46	.40	.40	.58	2.77	6.33	7.99	4.15	3.01
AC-FT	207800	102200	53360	49690	42650	43040	61790	296500	677400	854500	444200	321400

CAL YR 1979 TOTAL 1691360 MEAN 4634 MAX 28000 MIN 540 CFSM 2.31 IN 31.37 AC-FT 3355000
WTR YR 1980 TOTAL 1590370 MEAN 4345 MAX 29500 MIN 700 CFSM 2.17 IN 29.49 AC-FT 3154000

15292700 TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
OCT						
17...	1331	10	140	2.9	--	--
17...	1332	102	128	3.0	--	--
17...	1333	315	107	3.1	13.3	100
APR						
11...	1401	46	179	.1	--	--
11...	1402	70	179	.0	--	--
11...	1403	103	179	.0	--	--
11...	1404	127	179	.1	--	--
11...	1405	161	177	.0	--	--
MAY						
15...	1631	240	95	6.5	--	--
15...	1632	160	104	6.4	--	--
15...	1633	110	109	6.6	--	--
15...	1634	60	130	6.8	--	--
15...	1635	30	133	7.0	--	--
JUL						
03...	1601	36	72	8.3	--	--
03...	1602	71	72	8.3	--	--
03...	1603	126	72	8.3	--	--
03...	1604	196	72	8.3	--	--
03...	1605	256	72	8.3	--	--
AUG						
20...	1311	60	105	8.8	11.7	109
20...	1312	100	102	8.8	11.7	109
20...	1313	140	100	8.8	11.8	110
20...	1314	200	98	8.8	11.8	110
20...	1315	280	95	8.8	11.7	109

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
17...	1300	317	3080	--	6.8	--	13.3	100	746	K65	--	--
JAN												
17...	1320	--	E1000	--	6.6	.0	10.2	70	757	--	--	--
APR												
11...	1400	213	811	179	6.7	.0	13.5	96	733	--	<1	<1
MAY												
15...	1630	320	4220	--	6.6	--	--	--	--	<1	<1	<1
JUL												
03...	1630	342	12000	--	6.2	8.5	--	--	749	K18	K2	K3
AUG												
20...	1310	334	7750	--	--	--	--	--	752	--	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT											
17...	48	16	16	2.0	7.7	1.0	39	0	14	8.9	.1
JAN											
17...	66	19	22	2.8	13	1.4	58	0	16	19	.1
APR											
11...	57	16	19	2.3	11	2.4	50	0	12	22	.1
MAY											
15...	40	9	13	1.9	7.0	1.0	38	0	7.0	10	.1
JUL											
03...	33	8	11	1.4	3.2	.7	30	0	9.5	9.5	.5
AUG											
20...	39	6	13	1.6	4.4	.8	--	--	9.7	5.1	.1

E ESTIMATED
K NON-IDEAL COLONY COUNT

15292700 TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	CYANIDE TOTAL (MG/L AS CN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 17...	8.6	69	80	.42	.42	.000	--	.00	16	133	--
JAN 17...	11	119	116	.55	.55	.000	.000	--	11	--	--
APR 11...	8.6	118	102	.44	.45	.020	.000	.00	48	105	--
MAY 15...	8.8	87	71	.86	.87	.030	--	--	130	1480	11
JUL 03...	6.3	57	58	--	.21	--	.000	.00	288	9330	32
AUG 20...	6.7	65	62	.20	.23	.120	.060	--	157	3290	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT 17...	1300	2	2	0	200	--	20	<1	0	--	<1
APR 11...	1400	1	1	0	100	80	20	<1	1	--	<1
JUL 03...	1630	2	0	2	0	0	10	<1	0	0	2

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)
OCT 17...	0	0	0	<3	1	<10	180	--	17	0	--
APR 11...	0	0	0	<3	1	<10	730	690	43	3	3
JUL 03...	10	10	0	<3	7	<10	3200	3100	70	2	0

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT 17...	<10	10	4	--	2	--	--	.0	<10	--
APR 11...	0	15	10	0	10	.0	.0	.1	<10	0
JUL 03...	10	<4	90	90	5	.1	.1	.0	<10	0

DATE	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 17...	--	0	0	0	0	97	<6.0	0	--	14
APR 11...	0	0	0	0	0	130	<6.0	20	10	9
JUL 03...	0	0	0	0	0	53	<6.0	30	20	13

15292700 TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
JUL 03...	1630	<.5	1.4	<.3	1.0	.7	1.6	.6	1.5	<.01	.16

DATE	PCB TOTAL (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL (UG/L)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUL 03...	.00	0	.00	.0	.0	0	.00	.0	.00	.0

DATE	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)
JUL 03...	.00	.0	.00	.00	.0	.00	.00	.0	.00	.00

DATE	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
JUL 03...	.0	.00	.0	.00	.0	.00	.00	.0	.00	.00

DATE	MIREX, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JUL 03...	.00	.0	.00	.00	0	0	.00	.00	.00	.00

15294005 WILLOW CREEK NEAR WILLOW

LOCATION.--Lat 61°46'49", long 149°52'44", in NE¼SE¼ sec.31, T.20 N., R.3 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 0.7 mi (1.1 km) downstream from unnamed tributary, 5.7 mi (9.2 km) northeast of Willow, and 6.9 mi (11.1 km) upstream from Deception Creek.

DRAINAGE AREA.--166 mi² (430 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (107 m), from topographic map.

REMARKS.--Water-discharge records good except those for Dec. 2 to Apr. 21, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,450 ft³/s (126 m³/s) July 28, 1980, gage height, 8.80 ft (2.682 m); minimum daily, about 50 ft³/s (1.4 m³/s) Nov. 22-25, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,450 ft³/s (126 m³/s) July 28, gage height, 8.80 ft (2.682 m); minimum daily, about 70 ft³/s (2.0 m³/s) Mar. 11-31 and Apr. 2-5.

REVISIONS.--The maximum discharge for the water year 1979 has been revised to 3,000 ft³/s (85.0 m³/s) May 28, 1979, gage height, 7.82 ft (2.384 m), superseding figure published in the report for 1979.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	316	260	186	130	100	80	71	230	930	1290	1490	632
2	352	224	180	130	100	80	70	239	909	1230	1220	595
3	396	202	175	130	90	80	70	239	965	1270	1130	550
4	333	156	170	130	90	80	70	236	1280	1160	972	510
5	490	142	165	130	90	80	70	251	1850	1170	888	480
6	545	230	160	120	90	80	75	278	2130	1310	848	455
7	425	308	160	120	90	80	75	293	2070	1300	958	425
8	412	520	160	120	90	80	75	333	1580	1260	979	408
9	1020	560	160	120	90	80	75	326	1450	1220	812	380
10	874	575	160	120	90	80	75	322	1510	1070	764	364
11	716	1000	160	120	90	70	75	296	1590	1520	704	348
12	632	854	160	120	90	70	75	319	1400	1580	650	336
13	540	638	160	110	90	70	80	400	1340	1290	650	626
14	485	435	150	110	87	70	80	420	1450	1140	600	923
15	435	410	150	110	80	70	80	396	1240	1190	555	2960
16	400	380	150	110	80	70	80	420	1340	1110	656	1840
17	388	350	150	110	80	70	80	465	1470	1050	615	1140
18	352	322	150	110	80	70	80	475	1890	993	1800	916
19	305	300	150	110	80	70	90	525	1370	1030	1870	782
20	272	280	150	110	80	70	90	565	1590	1010	1440	698
21	278	284	147	110	80	70	100	505	1400	1030	1360	674
22	275	272	140	100	80	70	110	515	1220	993	1300	692
23	257	236	140	100	80	70	112	490	1190	930	1060	626
24	248	254	140	100	80	70	112	495	1250	944	937	644
25	242	287	140	100	80	70	132	500	1360	888	854	590
26	215	326	140	100	80	70	164	585	1360	1070	782	535
27	224	302	140	100	80	70	198	680	1290	1700	740	505
28	221	372	130	100	80	70	202	770	1290	3370	867	470
29	202	245	130	100	80	70	192	930	1280	1800	764	450
30	278	198	130	100	---	70	210	1050	1350	1450	692	435
31	344	---	130	100	---	70	---	1100	---	1540	638	---
TOTAL	12472	10922	4713	3480	2477	2270	3068	14648	42344	39908	29595	20989
MEAN	402	364	152	112	85.4	73.2	102	473	1411	1287	955	700
MAX	1020	1000	186	130	100	80	210	1100	2130	3370	1870	2960
MIN	202	142	130	100	80	70	70	230	909	888	555	336
CFSM	2.42	2.19	.92	.68	.51	.44	.61	2.85	8.50	7.75	5.75	4.22
IN.	2.79	2.45	1.06	.78	.56	.51	.69	3.28	9.49	8.94	6.63	4.70
AC-FT	24740	21660	9350	6900	4910	4500	6090	29050	83990	79160	58700	41630

CAL YR 1979 TOTAL 172834 MEAN 474 MAX 2700 MIN 64 CFSM 2.86 IN 38.73 AC-FT 342800
WTR YR 1980 TOTAL 186886 MEAN 511 MAX 3370 MIN 70 CFSM 3.08 IN 41.88 AC-FT 370700

NOTE.--No gage-height record Dec. 12 to Apr. 21.

15294005 WILLOW CREEK NEAR WILLOW--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1979 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1978, April to December 1979, April to September 1980 (fragmentary).

INSTRUMENTATION.--Temperature recorder since Oct. 5, 1978

REMARKS.--No record Dec. 13 to Apr. 21 and July 28 to Sept. 8 due to recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 15.5°C July 3, 1979 and July 23, 1980, but may have been greater during period of missing record, July 26 to Sept. 8, 1980; minimum, 0.0°C during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 15.5°C July 23, but may have been greater during period of missing record, July 26 to Sept. 8; minimum, 0.0°C most days during winter period.

TEMPERATURE, WATER (DEG. C), OCTOBER TO DECEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.5	4.5	2.0	1.0	.0	.0						
2	5.5	5.0	2.0	1.5	.0	.0						
3	6.5	5.0	2.0	.5	.0	.0						
4	6.0	4.5	.5	.0	.0	.0						
5	6.0	5.5	.0	.0	.0	.0						
6	6.0	5.0	.5	.0	.0	.0						
7	5.5	4.5	1.5	.5	.0	.0						
8	5.5	4.5	3.0	2.0	.0	.0						
9	6.5	5.5	3.0	2.0	.0	.0						
10	6.0	5.0	3.0	2.5	.0	.0						
11	6.0	5.0	3.0	3.0	.0	.0						
12	5.5	4.0	3.0	1.5	.0	.0						
13	4.5	3.0	1.5	.0	---	---						
14	4.0	2.0	.0	.0	---	---						
15	3.5	2.0	1.0	.0	---	---						
16	4.0	3.0	.5	.0	---	---						
17	4.0	2.5	.0	.0	---	---						
18	3.0	1.5	.0	.0	---	---						
19	1.5	.0	.0	.0	---	---						
20	.5	.0	.0	.0	---	---						
21	.5	.0	.5	.0	---	---						
22	1.5	.5	.5	.0	---	---						
23	1.5	1.0	.0	.0	---	---						
24	2.0	1.0	.0	.0	---	---						
25	2.0	1.5	.0	.0	---	---						
26	1.0	.0	.0	.0	---	---						
27	1.5	1.0	.0	.0	---	---						
28	1.5	.5	.0	.0	---	---						
29	2.0	1.0	.5	.0	---	---						
30	2.5	1.5	.5	.0	---	---						
31	1.5	1.0	---	---	---	---						
MONTH	6.5	.0	3.0	.0		.0						

15294005 WILLOW CREEK NEAR WILLOW--Continued

TEMPERATURE, WATER (DEG. C), APRIL TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	3.5	1.0	8.0	4.5	---	---			---	---
2	---	---	4.0	1.5	6.5	5.0	---	---			---	---
3	---	---	3.5	2.0	8.0	4.5	---	---			---	---
4	---	---	4.0	2.0	10.5	5.5	---	---			---	---
5	---	---	4.0	1.5	9.5	5.0	---	---			---	---
6	---	---	4.5	2.5	---	---	---	---			---	---
7	---	---	5.5	2.0	---	---	---	---			---	---
8	---	---	4.5	2.0	---	---	---	---			---	---
9	---	---	6.0	2.0	---	---	---	---			8.5	7.5
10	---	---	6.5	3.0	---	---	10.5	8.0			9.0	6.0
11	---	---	5.5	3.5	---	---	10.5	8.5			9.0	6.5
12	---	---	7.5	2.5	---	---	10.5	7.0			8.0	5.5
13	---	---	6.0	2.5	---	---	14.0	8.0			8.5	7.0
14	---	---	6.0	3.5	---	---	15.0	9.0			11.0	8.5
15	---	---	6.0	3.0	---	---	12.0	9.5			10.5	9.0
16	---	---	6.5	3.0	---	---	10.5	9.0			11.0	7.5
17	---	---	6.5	3.5	---	---	12.0	8.5			9.0	6.5
18	---	---	7.0	3.0	---	---	14.5	9.0			8.0	6.0
19	---	---	8.0	3.0	---	---	15.0	9.5			7.0	5.0
20	---	---	5.5	3.5	---	---	15.0	9.5			6.5	5.0
21	---	---	4.5	3.5	---	---	15.0	9.0			7.0	6.0
22	2.5	---	7.0	3.5	---	---	15.0	9.5			7.5	6.5
23	2.5	1.0	7.0	4.5	---	---	15.5	10.5			7.5	6.5
24	4.0	.5	6.0	4.5	---	---	14.5	11.0			7.5	7.0
25	3.5	.5	7.0	4.5	---	---	12.5	10.5			7.0	6.0
26	3.5	.5	6.5	4.0	---	---	11.0	9.0			7.0	6.5
27	2.0	.5	7.0	3.5	---	---	9.5	9.0			7.5	6.0
28	2.5	.5	7.5	4.5	---	---	---	---			7.0	5.0
29	3.5	.5	8.5	3.5	---	---	---	---			7.0	5.5
30	3.0	.5	6.0	4.5	---	---	---	---			7.5	6.5
31	---	---	7.0	3.5	---	---	---	---			---	---
MONTH			8.5	1.0			15.5					5.0

15294010 DECEPTION CREEK NEAR WILLOW

LOCATION.--Lat 61°44'52", long 149°56'14", in NE¼SE¼ sec.11, T.19 N., R.4 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 0.6 mi (1.0 km) downstream from unnamed tributary, 3.3 mi (5.3 km) east of Willow, and 4.9 mi (7.9 km) upstream from mouth. Prior to May 1, 1980, at site 500 ft (150 m) upstream.

DRAINAGE AREA.--48.0 mi² (124.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map. Prior to May 1, 1980 at site 500 ft (150 m) upstream at different datum.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Nov. 11 to Apr. 30, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 751 ft³/s (21.3 m³/s) June 21, 1980, gage height, 8.44 ft (2.572 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 10, 1979, gage height, 3.52 ft (1.073 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 751 ft³/s (21.3 m³/s) June 21, gage height, 8.44 ft (2.572 m); minimum daily, about 22 ft³/s (0.6 m³/s) Mar. 7 to Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	140	60	40	25	23	22	197	181	184	155	62
2	60	124	50	40	25	23	22	209	132	116	104	59
3	95	105	50	40	25	23	22	222	115	99	102	56
4	88	74	50	40	25	23	22	181	109	93	81	54
5	100	92	50	40	25	23	22	173	110	79	67	52
6	140	74	50	40	25	23	25	173	107	78	62	50
7	120	221	50	35	25	22	25	167	99	82	89	48
8	100	324	50	35	23	22	25	174	83	96	172	47
9	200	257	50	35	23	22	25	148	77	109	107	45
10	170	263	50	35	23	22	25	133	73	88	85	42
11	140	450	45	35	23	22	25	122	85	123	75	42
12	100	350	45	35	23	22	30	109	119	123	65	42
13	80	250	45	35	23	22	30	125	111	120	71	140
14	70	190	45	35	23	22	30	115	172	89	69	268
15	60	170	45	35	23	22	30	104	114	75	58	377
16	53	150	45	30	23	22	40	98	98	81	67	486
17	50	130	45	30	23	22	50	99	123	83	83	223
18	45	110	45	30	23	22	60	95	498	95	208	139
19	45	100	45	30	23	22	70	97	388	76	248	107
20	45	90	45	30	23	22	90	97	431	91	125	89
21	40	90	45	30	23	22	110	111	520	72	163	89
22	40	80	45	30	23	22	121	214	241	60	113	113
23	40	80	45	30	23	22	130	144	155	54	144	119
24	40	70	45	30	23	22	140	105	117	50	96	120
25	40	70	45	30	23	22	150	90	119	51	77	121
26	40	80	40	30	23	22	160	99	123	63	67	95
27	40	90	40	30	23	22	170	116	98	99	62	82
28	40	100	40	30	23	22	180	103	90	426	111	74
29	60	80	40	30	23	22	170	134	96	228	101	71
30	100	60	40	25	---	22	180	134	179	155	77	73
31	160	---	40	25	---	22	---	270	---	158	68	---
TOTAL	2455	4464	1425	1025	681	688	2201	4358	4963	3396	3172	3385
MEAN	79.2	149	46.0	33.1	23.5	22.2	73.4	141	165	110	102	113
MAX	200	450	60	40	25	23	180	270	520	426	248	486
MIN	40	60	40	25	23	22	22	90	73	50	58	42
CFSM	1.65	3.10	.96	.69	.49	.46	1.53	2.94	3.44	2.29	2.13	2.35
IN.	1.90	3.46	1.10	.79	.53	.53	1.71	3.38	3.85	2.63	2.46	2.62
AC-FT	4870	8850	2830	2030	1350	1360	4370	8640	9840	6740	6290	6710

CAL YR 1979 TOTAL 31592 MEAN 86.6 MAX 501 MIN 14 CFSM 1.80 IN 24.48 AC-FT 62660
WTR YR 1980 TOTAL 32213 MEAN 88.0 MAX 520 MIN 22 CFSM 1.83 IN 24.96 AC-FT 63890

15294010 DECEPTION CREEK NEAR WILLOW--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 and 1980.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1978, May to October 1979, and May to September 1980 (fragmentary).

INSTRUMENTATION.--Temperature recorder since Oct. 1, 1978.

REMARKS.-Missing record due to ice cover and recorder malfunction from June through September.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.0°C, July 3, 1979; minimum, 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum not determined; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
25...	1045	40	110	6.7	3.0	2.0	13.1	97	763	27	<1
APR											
01...	1400	22	135	6.8	8.0	.0	12.9	89	756	170	<1

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT											
25...	33	2	10	1.9	8.8	1.0	37	0	8.3	10	.1
APR											
01...	40	6	12	2.4	11	1.1	41	0	1.1	17	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT										
25...	12	75	71	.22	.18	.020	.34	.36	.58	.000
APR										
01...	13	83	80	.22	.24	.010	.47	.48	.70	.030

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT										
25...	.000	1	200	1	0	1	320	--	260	4
APR										
01...	.020	1	100	1	0	4	370	150	220	3

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT										
25...	20	0	30	.1	0	0	0	.00	1	.11
APR										
01...	40	0	40	.0	0	4	10	.00	10	.59

15294010 DECEPTION CREEK NEAR WILLOW--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1979

DAY	MAX	MIN	DAY	MAX	MIN
1	7.0	5.5	3	7.0	6.5
2	7.0	6.0	4	7.0	6.5

TEMPERATURE, WATER (DEG. C), MAY TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	8.0	7.0	8.5	8.5			---	---
2			---	---	8.0	8.0	10.5	8.5			---	---
3			---	---	8.0	7.5	10.5	10.5			---	---
4			---	---	11.0	8.0	10.5	9.5			---	---
5			3.0	1.5	11.0	10.5	10.5	10.0			---	---
6			3.5	3.0	---	---	10.0	10.0			---	---
7			4.0	3.5	---	---	10.0	10.0			---	---
8			4.5	4.0	---	---	10.0	10.0			---	---
9			5.0	4.0	---	---	---	---			7.5	6.5
10			5.5	4.5	---	---	---	---			7.5	6.0
11			5.5	4.5	---	---	---	---			7.0	6.0
12			6.5	4.0	---	---	---	---			6.5	6.0
13			6.5	4.5	---	---	---	---			6.5	6.0
14			5.5	5.0	---	---	---	---			7.5	6.0
15			5.5	4.5	---	---	---	---			7.5	7.5
16			5.5	4.5	---	---	---	---			7.5	7.5
17			5.5	5.0	---	---	---	---			---	---
18			7.0	4.5	---	---	---	---			---	---
19			7.0	5.5	---	---	---	---			---	---
20			7.0	6.0	---	---	---	---			---	---
21			6.0	5.0	---	---	---	---			---	---
22			5.5	5.0	---	---	---	---			---	---
23			6.5	5.5	---	---	---	---			---	---
24			6.5	6.0	---	---	---	---			---	---
25			7.0	6.0	---	---	---	---			---	---
26			7.0	6.5	---	---	---	---			---	---
27			6.5	6.0	---	---	---	---			---	---
28			7.5	6.5	---	---	---	---			---	---
29			8.0	6.5	---	---	---	---			---	---
30			8.0	7.5	---	---	---	---			---	---
31			7.5	6.5	---	---	---	---			---	---

15294100 DESHKA RIVER NEAR WILLOW

LOCATION.--Lat 61°46'05", long 150°20'13, in SW¼NE¼ sec.3, T.19 N., R.6 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 0.2 mi (0.3 km) upstream from unnamed tributary, 1.1 mi (1.8 km) downstream from unnamed tributary, 7.9 mi (12.7 km) upstream from mouth, and 10 mi (16 km) west of Willow.

DRAINAGE AREA.--592 mi^2 (1,530 km^2).

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (24 m), from topographic map.

REMARKS.--Records good except those for Nov. 18 to Apr. 26, which are poor. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,920 ft^3/s (281 m^3/s) Nov. 13, 1979, gage height, 8.16 ft (2.487 m); minimum, 216 ft^3/s (6.12 m^3/s), Sept. 12, 1979, gage height 1.43 ft (0.436 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,920 ft^3/s (281 m^3/s) Nov. 13, gage height, 8.16 ft (2.487 m); minimum daily, about 320 ft^3/s (9.1 m^3/s) Mar. 20 to Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	2640	1400	440	380	340	320	3870	3240	2840	1180	762
2	940	2490	1100	420	380	340	320	3860	2510	3320	1010	682
3	1120	2020	900	420	360	340	320	3880	1960	2190	920	639
4	1180	1620	800	420	360	340	330	3810	1640	1640	940	605
5	1130	1390	700	420	360	340	340	3560	1410	1400	820	581
6	1660	1340	600	400	360	340	350	3460	1220	1250	726	565
7	2970	1430	580	400	360	340	370	3450	1070	1360	771	549
8	3660	2270	560	400	360	340	390	3250	960	1620	1180	525
9	2910	3630	540	400	360	340	400	3190	890	1550	1240	518
10	3000	4350	520	400	360	340	420	2900	830	1290	1080	502
11	2660	5170	500	400	360	340	450	2970	840	1440	1020	495
12	2060	6730	500	400	360	340	500	3070	1150	3080	910	488
13	1800	9440	480	400	360	340	540	2750	1200	4280	753	573
14	1500	6160	480	400	360	340	580	2580	1060	4780	726	880
15	1290	4730	480	380	360	340	640	2420	920	3050	726	1850
16	1140	3530	480	380	360	340	740	2360	810	2030	830	2560
17	1040	2620	460	380	380	340	900	2200	753	1750	1550	2150
18	980	2200	460	380	380	340	860	1990	880	1780	1470	1580
19	900	1900	460	380	380	340	860	1740	1480	1550	2060	1240
20	820	1700	460	380	380	320	940	1600	1720	1240	1990	1040
21	726	1500	460	380	380	320	1100	1630	2910	1040	1420	940
22	726	1300	460	380	360	320	1400	2450	4040	910	1530	910
23	699	1200	460	380	360	320	1700	2620	4670	810	1910	900
24	664	1100	460	380	360	320	2100	2150	2150	744	1390	880
25	639	1000	460	380	360	320	2500	1780	1620	735	1080	860
26	622	1100	440	380	340	320	2900	1580	1810	790	920	830
27	614	1200	440	380	340	320	3180	1510	1590	753	820	780
28	630	1300	440	380	340	320	3400	1390	1360	1060	840	744
29	622	1400	440	380	340	320	3720	1660	1280	1900	930	726
30	771	1600	440	380	---	320	3870	1840	1470	1430	930	753
31	1810	---	440	380	---	320	---	2620	---	1210	830	---
TOTAL	42343	80060	17400	12180	10500	10300	36440	80140	49443	54822	34502	27107
MEAN	1366	2669	561	393	362	332	1215	2585	1648	1768	1113	904
MAX	3660	9440	1400	440	380	340	3870	3880	4670	4780	2060	2560
MIN	614	1000	440	380	340	320	320	1390	753	735	726	488
CFSM	2.31	4.51	.95	.66	.61	.56	2.05	4.37	2.78	2.99	1.88	1.53
IN.	2.66	5.03	1.09	.77	.66	.65	2.29	5.04	3.11	3.44	2.17	1.70
AC-FT	83990	158800	34510	24160	20830	20430	72280	159000	98070	108700	68430	53770

CAL YR 1979 TOTAL 409893 MEAN 1123 MAX 9440 MIN 222 CFSM 1.90 IN 25.76 AC-FT 813000
WTR YR 1980 TOTAL 455237 MEAN 1244 MAX 9440 MIN 320 CFSM 2.10 IN 28.61 AC-FT 903000

NOTE.--No gage-height record Dec. 14 to Apr. 13.

15294300 SKWENTNA RIVER NEAR SKWENTNA

LOCATION.--Lat 61°52'23", long 151°22'01", in NW¼ sec.31, T.21 N., R.11 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 2 mi (3 km) downstream from Shell Creek, 8 mi (13 km) southwest of Skwentna, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--2,250 mi² (5,830 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 1936: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 200 ft (61 m), from topographic map.

REMARKS.--Records fair except those for Nov. 15 to Apr. 28, which are poor. Summer flows augmented by glaciers that cover 16 percent of the basin.

AVERAGE DISCHARGE.--21 years, 6,512 ft³/s (184.4 m³/s), 39.31 in/yr (998 mm/yr), 4,718,000 acre-ft/yr (5.82 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,600 ft³/s (1,460 m³/s) June 9, 1977, gage height, 15.09 ft (4.599 m), from rating curve extended above 35,000 ft³/s (990 m³/s); minimum daily, about 600 ft³/s (17.0 m³/s) Mar. 1-31, 1964, Dec. 16, 1968 to Mar. 15, 1969, Mar. 9 to Apr. 26, 1971, and Mar. 5 to Apr. 5, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46,000 ft³/s (1,303 m³/s) July 13, gage height, 14.74 ft (4.493 m); minimum daily, about 1,300 ft³/s (37 m³/s) Mar. 13-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6100	5320	2800	2000	1600	1400	1400	3760	19500	30800	17700	9820
2	6000	5150	2700	2000	1600	1400	1400	4260	20000	26400	16400	9250
3	6200	4260	2600	1900	1600	1400	1400	5200	19500	24500	15400	8440
4	6600	3540	2500	1900	1600	1400	1500	5800	19800	22700	14500	7810
5	6200	3130	2500	1900	1700	1400	1500	6730	21800	23600	14800	7630
6	7000	3370	2400	1900	1700	1400	1500	7600	25700	28200	15400	7360
7	8500	4720	2400	1900	1800	1400	1500	8050	29700	32900	17600	7200
8	10000	7510	2300	1900	1800	1400	1500	8650	30500	31400	15600	7000
9	12000	8740	2300	1900	1800	1400	1500	9460	27800	27800	18400	7000
10	14400	8440	2300	1900	1800	1400	1500	11100	25600	25800	20000	7480
11	16900	9190	2300	1900	1700	1400	1600	11400	25100	28200	18000	7210
12	16600	8560	2200	1800	1700	1400	1600	11000	24000	39600	17000	7210
13	12800	6020	2200	1800	1700	1300	1600	10800	23200	43000	16000	8800
14	9670	3790	2200	1800	1600	1300	1650	10700	24400	37100	17000	10100
15	8230	2900	2200	1800	1600	1300	1700	11700	24800	35500	15000	12000
16	7300	3400	2200	1800	1600	1300	1700	11400	23600	32500	14000	11800
17	7120	3100	2200	1800	1600	1300	1800	13000	23400	28400	13000	10300
18	6580	3000	2100	1800	1600	1300	1800	12000	24400	26000	12000	9580
19	5620	2900	2100	1700	1500	1300	1900	12000	25600	25900	13000	9280
20	5050	2800	2100	1700	1500	1300	1900	11000	26000	27000	13000	8950
21	4600	2700	2100	1700	1600	1300	2000	11000	24000	28200	12800	8860
22	4450	2600	2100	1700	1600	1300	2100	11000	20700	28700	12400	8860
23	4120	2500	2100	1700	1600	1300	2200	13000	20800	29800	11400	8920
24	4080	2500	2100	1700	1500	1300	2400	15000	23200	29900	10600	8920
25	4010	2500	2000	1700	1500	1300	2500	16500	29100	29600	10200	8500
26	3740	2500	2000	1600	1500	1300	2700	17400	30500	29400	9880	8680
27	3540	2500	2000	1600	1500	1300	2900	16800	27900	27200	9790	9880
28	3230	2500	2000	1600	1500	1400	3100	18000	28800	25200	9790	9670
29	3410	2700	2000	1600	1500	1400	3450	19500	26900	22800	9820	8470
30	4850	3000	2000	1600	---	1400	3410	21200	27200	20800	9610	8560
31	5980	---	2000	1600	---	1400	---	22200	---	18200	9640	---
TOTAL	224880	125840	69000	55200	46900	41900	58710	367210	743500	887100	429730	263540
MEAN	7254	4195	2226	1781	1617	1352	1957	11850	24780	28620	13860	8785
MAX	16900	9190	2800	2000	1800	1400	3450	22200	30500	43000	20000	12000
MIN	3230	2500	2000	1600	1500	1300	1400	3760	19500	18200	9610	7000
CFSM	3.22	1.86	.99	.79	.72	.60	.87	5.27	11.0	12.7	6.16	3.90
IN.	3.72	2.08	1.14	.91	.78	.69	.97	6.07	12.29	14.67	7.10	4.36
AC-FT	446000	249600	136900	109500	93030	83110	116500	728400	1475000	1760000	852400	522700

CAL YR 1979 TOTAL 2590730 MEAN 7098 MAX 32100 MIN 960 CFSM 3.16 IN 42.83 AC-FT 5139000
WTR YR 1980 TOTAL 3313510 MEAN 9053 MAX 43000 MIN 1300 CFSM 4.02 IN 54.78 AC-FT 6572000

NOTE.--No gage-height record Dec. 10 to Apr. 13.

15294300 SKWENTNA RIVER NEAR SKWENTNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1961, 1967-68, 1974-75, and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT 10...	1200	14100	6.0	275	10500	--	--	--
JUN 12...	1115	23800	5.0	627	40300	--	--	--
AUG 21...	2000	12900	--	626	21800	11	12	17

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
OCT 10...	--	--	11	23	49	80	97	100
JUN 12...	--	--	--	--	--	--	--	--
AUG 21...	22	27	33	41	64	92	99	100

15294350 SUSITNA RIVER AT SUSITNA STATION
(National stream-quality accounting and pesticide network station)

LOCATION.--Lat 61°32'41", long 150°30'45", in SE¼SE¼ sec.22, T.17 N., R.7 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank at Susitna Station, 1.5 mi (2.4 km) downstream from Yentna River, and 12.5 mi (20.1 km) upstream from Alexander Creek.

DRAINAGE AREA.--19,400 mi^2 (50,200 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Water-discharge records good Oct. 1 to Nov. 14 and May 12 to Aug. 12, fair Aug. 13 to Sept. 30, and poor Nov. 15 to May 11.

AVERAGE DISCHARGE.--6 years, 50,620 ft^3/s (1,434 m^3/s), 35.43 in/yr (900 mm/yr), 36,670,000 acre-ft/yr (45.2 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 230,000 ft^3/s (6,510 m^3/s) July 29, 1980, gage height, 20.26 ft (6.175 m); minimum daily, about 5,200 ft^3/s (147 m^3/s) Feb. 21 to Mar. 5, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 230,000 ft^3/s (6,510 m^3/s) July 29, gage height, 20.26 ft (6.175 m); minimum daily, about 8,600 ft^3/s (244 m^3/s) Mar. 19-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59800	45600	19000	11500	9300	8800	9300	20000	123000	186000	163000	91000
2	56800	42200	19000	11500	9300	8800	9400	22000	115000	175000	153000	89000
3	58200	40000	18000	11000	9200	8800	9500	26000	113000	159000	144000	87000
4	60700	36700	18000	11000	9200	8800	9700	29000	110000	154000	138000	86000
5	62200	33300	17500	11000	9200	8800	9700	34000	121000	146000	130000	84000
6	73000	30700	17500	11000	9200	8800	9800	41000	144000	145000	129000	82000
7	90900	32500	17000	11000	9200	8800	10000	47000	158000	163000	134000	82000
8	78500	38200	17000	10500	9200	8800	10000	52000	165000	180000	140000	81000
9	77400	43400	16500	10500	9200	8900	10000	58000	156000	184000	134000	80000
10	83000	45500	16500	10500	9100	9100	10500	62000	147000	174000	142000	81000
11	90000	48200	16000	10500	9100	9200	10500	64000	145000	166000	155000	81000
12	93300	47800	16000	10000	9100	9400	10500	65400	151000	193000	150000	81000
13	88600	44400	15000	10000	9100	9300	10500	66100	142000	213000	140000	82000
14	76500	40300	15000	10000	9000	9200	10500	65200	135000	219000	136000	85000
15	68400	36000	14500	10000	9000	9100	11000	66500	135000	214000	130000	95000
16	62500	33000	14000	10000	9000	8900	11000	69200	136000	200000	124000	110000
17	58600	30000	13800	10000	9000	8800	12000	69400	131000	189000	122000	135000
18	56000	27000	13500	10000	9000	8700	12000	70200	138000	191000	119000	120000
19	52700	25000	13000	10000	8900	8600	12000	68900	157000	185000	118000	105000
20	48500	24000	13000	9500	8900	8600	13000	69100	161000	179000	118000	96000
21	44700	23000	13000	9500	8900	8700	13000	74000	173000	176000	119000	94000
22	42100	22000	13000	9500	8800	8700	13000	77300	158000	174000	120000	94000
23	40500	21000	13000	9500	8800	8800	14000	75700	141000	170000	121000	93000
24	39100	21000	12500	9500	8800	8800	14000	77700	133000	169000	119000	92000
25	37900	20000	12000	9500	8800	8900	15000	80000	136000	168000	116000	91000
26	37300	19500	12000	9500	8800	8900	15000	85300	149000	168000	110000	90000
27	36000	19500	12000	9500	8800	8900	15000	89300	150000	174000	106000	89000
28	34700	19000	12000	9500	8800	9000	16000	92800	148000	201000	102000	88000
29	33800	19000	12000	9400	8800	9000	17000	108000	154000	226000	99000	87000
30	34200	20000	12000	9400	---	9100	18000	115000	162000	203000	95000	85000
31	42000	---	12000	9400	---	9100	---	124000	---	178000	92000	---
TOTAL	1817900	947800	455300	313700	261500	276100	360900	2064100	4287000	5622000	3918000	2736000
MEAN	58640	31590	14690	10120	9017	8906	12030	66580	142900	181400	126400	91200
MAX	93300	48200	19000	11500	9300	9400	18000	124000	173000	226000	163000	135000
MIN	33800	19000	12000	9400	8800	8600	9300	20000	110000	145000	92000	80000
CFSM	3.02	1.63	.76	.52	.47	.46	.62	3.43	7.37	9.35	6.52	4.70
IN.	3.49	1.82	.87	.60	.50	.53	.69	3.96	8.22	10.78	7.51	5.25
AC-FT	3606000	1880000	903100	622200	518700	547600	715800	4094000	8503000	11150000	7771000	5427000

CAL YR 1979 TOTAL 20932300 MEAN 57350 MAX 175000 MIN 6500 CFSM 2.96 IN 40.14 AC-FT 41520000
WTR YR 1980 TOTAL 23060300 MEAN 63010 MAX 226000 MIN 8600 CFSM 3.25 IN 44.22 AC-FT 45740000

NOTE.--No gage-height record Nov. 20 to May 11 and Aug. 13 to Sept. 30.

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1970, 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1975 to current year (seasonal).

INSTRUMENTATION.--Temperature recorder since May 23, 1975.

REMARKS.--No record Oct. 24-30, Nov. 3-8, and Nov. 25 to May 12 when probe was not reflecting water temperature. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross-sections June 16 and July 30. A maximum variation of 2.5°C was found within the cross-sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 16.5°C July 9, 1976 and July 3 and 4, 1979; minimum, 0.0°C on most days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 14.5°C July 21-23; minimum, 0.0°C on most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
17...	1305	150	184	7.2	.0	13.0	--
17...	1310	350	182	7.2	.0	13.0	--
17...	1315	500	179	7.2	.0	--	--
17...	1320	600	182	7.2	.0	--	--
17...	1325	750	183	7.2	.0	12.6	--
FEB							
12...	1231	200	185	7.2	.0	11.4	78
12...	1232	290	182	7.3	.0	11.4	78
12...	1233	380	180	7.2	.0	10.9	74
12...	1234	470	182	7.2	.0	--	--
12...	1235	570	180	7.2	.0	9.9	67
15...	1631	200	--	--	--	--	--
15...	1632	290	--	--	--	--	--
15...	1634	470	--	--	--	--	--
15...	1635	570	--	--	--	--	--
MAR							
12...	1131	120	180	7.0	.0	11.8	81
12...	1132	200	190	7.2	.0	12.0	82
12...	1133	320	--	7.5	.0	--	--
12...	1134	480	192	7.9	.0	11.2	77
12...	1135	600	195	7.5	.0	10.6	73
JUN							
16...	1531	60	104	7.0	11.4	--	--
16...	1532	110	105	7.1	11.3	--	--
16...	1533	160	105	7.1	11.4	--	--
16...	1534	260	105	7.2	11.4	--	--
16...	1535	360	--	7.2	11.4	--	--
16...	1536	410	112	--	10.6	--	--
16...	1537	460	--	7.2	10.3	--	--
16...	1538	610	--	7.2	9.5	--	--
16...	1539	710	111	7.2	9.1	--	--
16...	1540	860	112	7.2	9.0	--	--
16...	1541	1160	118	7.3	9.3	--	--
JUL							
30...	1501	110	110	7.8	10.5	10.1	92
30...	1502	160	120	7.9	10.5	10.2	93
30...	1503	210	110	8.0	10.5	10.3	94
30...	1504	310	115	7.9	10.3	10.3	94
30...	1505	410	115	8.0	9.9	10.4	93
30...	1506	560	115	8.0	9.7	10.6	94
30...	1507	660	115	8.0	9.0	10.6	93
30...	1508	860	120	8.2	8.5	11.0	95
30...	1509	1260	124	8.2	8.4	11.1	96
30...	1510	1760	129	8.1	8.5	11.1	96
30...	1511	1900	129	7.8	8.6	11.2	96

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SEDI- MENT, SUS- PENDED (MG/L)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
DEC							
17...	--	--	72	0	17	2	330
17...	--	--	71	0	14	3	320
17...	--	--	75	0	15	2	360
17...	--	--	79	0	16	2	300
17...	--	--	81	0	16	6	360
FEB							
12...	K11	<1	72	0	--	--	--
12...	K9	<1	72	0	--	--	--
12...	K12	<1	73	0	--	--	--
12...	26	<1	78	0	--	--	--
12...	41	<1	84	0	--	--	--
15...	23	<1	--	--	--	--	--
15...	24	<1	--	--	--	--	--
15...	62	<1	--	--	--	--	--
15...	90	<1	--	--	--	--	--
MAR							
12...	--	--	82	--	--	--	490
12...	--	--	82	--	--	--	410
12...	--	--	84	--	--	--	480
12...	--	--	88	--	--	--	720
12...	--	--	98	--	--	--	520

DATE	TIME	STREAM WIDTH (FT)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
DEC												
17...	1300	--	14300	182	7.2	.0	1.2	736	K5	<1	73	10
FEB												
12...	1230	970	E8990	185	--	--	1.2	767	K20	<1	76	14
15...	1630	970	8990	--	--	--	--	--	--	--	--	--
MAR												
12...	1130	900	9360	185	--	.0	1.4	761	K4	<1	78	7
JUN												
16...	1530	1900	144000	111	7.2	--	110	752	K12	K5	44	0
JUL												
30...	1500	1910	207000	120	8.0	--	180	751	K58	K41	49	6

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
DEC												
17...	23	3.7	4.9	1.4	77	0	15	5.7	.2	12	112	105
FEB												
12...	24	4.0	7.3	1.5	--	--	20	13	.1	10	114	118
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
12...	25	3.8	7.7	1.6	86	0	16	11	.2	11	119	120
JUN												
16...	14	2.1	2.3	1.2	44	0	9.9	2.1	.1	5.5	65	68
JUL												
30...	16	2.2	2.0	1.3	52	0	12	1.2	.3	4.9	67	66

E ESTIMATED
K NON-IDEAL COLONY COUNT

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
DEC 17...	.39	.35	.010	.010	.36	.21	.37	.15	.22	.76	.57	.010
FEB 12...	.27	.29	.040	.040	.46	.26	.50	.20	.30	.77	.59	.000
15...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 12...	.25	.27	.000	.010	.40	.41	.40	.00	.42	.65	.69	.010
JUN 16...	.22	.19	.050	.040	.51	2.3	.56	.00	2.3	.78	2.5	.240
JUL 30...	.09	.06	.000	.000	.77	.36	.77	.41	.36	.86	.42	.750

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 17...	.000	2.2	--	--	--	--	--	--	3	116	--
FEB 12...	.000	1.9	--	--	--	--	--	--	12	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
MAR 12...	.010	--	--	--	.080	.080	.000	.000	3	76	--
JUN 16...	.000	--	5.9	.8	--	--	--	--	458	178000	58
JUL 30...	.010	--	3.7	1.1	--	--	--	--	1490	833000	60

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
DEC 17...	1300	--	--	--	--	--	--	--	--	--	--
MAR 12...	1130	3	1	2	100	60	40	0	0	<1	0
JUN 16...	1530	9	6	3	100	70	30	0	--	<1	30
JUL 30...	1500	16	13	3	400	400	30	0	0	1	60

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
DEC 17...	--	--	--	--	--	--	--	--	260	--	--
MAR 12...	0	0	0	0	<3	5	3	2	450	300	150
JUN 16...	20	10	5	--	<3	26	24	2	16000	16000	20
JUL 30...	50	10	11	--	<3	75	72	3	38000	38000	140

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
MAR											
12...	2	2	0	30	0	30	.1	.1	.0	4	1
JUN											
16...	4	1	3	270	270	5	.1	.1	.0	19	19
JUL											
30...	16	14	2	700	690	10	.1	.0	.1	40	40

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC										
17...	--	--	--	--	0	--	--	--	--	--
MAR										
12...	3	1	0	1	0	0	0	20	20	<3
JUN										
16...	0	1	1	0	2	2	0	50	--	<3
JUL										
30...	0	1	1	0	0	0	0	140	130	7

DATE	TIME	PCB TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)
DEC												
17...	1300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR												
12...	1130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUN												
16...	1530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
DEC												
17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR												
12...	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--
JUN												
16...	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--

ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO JULY 1980

DATE TIME	DEC 17,79 1300	MAR 12,80 1130	JUN 16,80 1530	JUL 30,80 1500
TOTAL CELLS/ML	86	10	78	830
DIVERSITY: DIVISION	0.7	0.0	0.0	0.0
.CLASS	0.7	0.0	0.0	0.0
..ORDER	0.7	0.0	0.7	0.0
...FAMILY	0.7	0.0	0.7	0.0
....GENUS	0.7	1.0	0.7	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	5#	50	--	-	--	-
....CHLORELLA	71#	82	5#	50	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	15#	18	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	65#	83	--	-
..PENNALES								
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	830#	100
...MERIDIONACEAE								
....MERIDION	--	-	--	-	13#	17	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			MAY	
1	5.5	5.0	5.0	1.0	1.0	1.0	---	---	---
2	5.5	5.0	5.0	1.0	1.0	1.0	---	---	---
3	6.0	5.5	5.5	---	---	---	---	---	---
4	6.0	5.5	6.0	---	---	---	---	---	---
5	6.0	5.5	5.5	---	---	---	---	---	---
6	6.0	5.5	6.0	---	---	---	---	---	---
7	6.0	5.0	5.5	---	---	---	---	---	---
8	5.5	5.0	5.0	---	---	---	---	---	---
9	5.5	5.0	5.0	1.0	.0	.5	---	---	---
10	5.5	5.0	5.5	1.5	1.0	1.0	---	---	---
11	5.5	5.5	5.5	1.5	1.5	1.5	---	---	---
12	5.5	5.0	5.0	1.5	1.0	1.0	---	---	---
13	5.0	4.5	4.5	1.0	.5	.5	7.0	5.5	6.0
14	4.0	3.0	3.5	.5	.0	.0	7.0	6.5	7.0
15	3.5	3.0	3.0	.0	.0	.0	7.5	6.0	7.0
16	3.5	3.5	3.5	.0	.0	.0	7.5	6.5	7.0
17	3.5	3.0	3.0	.0	.0	.0	8.0	6.5	7.0
18	3.5	3.0	3.0	.0	.0	.0	8.0	6.5	7.0
19	3.0	1.5	2.0	.0	.0	.0	8.0	6.0	7.0
20	1.5	.5	1.0	.0	.0	.0	8.0	7.5	7.5
21	.5	.0	.5	.0	.0	.0	7.5	6.0	6.5
22	.5	.0	.5	.0	.0	.0	7.5	5.5	6.0
23	.5	.0	.5	.0	.0	.0	8.0	6.5	7.0
24	---	---	---	.0	.0	.0	8.0	7.0	7.5
25	---	---	---	---	---	---	8.5	7.0	7.5
26	---	---	---	---	---	---	8.5	7.5	8.0
27	---	---	---	---	---	---	8.5	7.5	8.0
28	---	---	---	---	---	---	9.5	8.5	9.0
29	---	---	---	---	---	---	9.5	8.5	9.0
30	---	---	---	---	---	---	9.5	8.5	9.0
31	1.5	1.0	1.0	---	---	---	8.5	7.5	8.0
MONTH	6.0				.0		9.5		

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.0	7.5	8.0	10.0	8.5	9.0	12.5	11.0	12.0	11.5	9.0	10.0
2	9.0	8.5	9.0	11.5	9.5	10.5	12.5	11.0	11.5	8.5	7.0	7.5
3	9.5	8.5	9.0	11.5	11.0	11.5	11.5	10.0	10.5	7.0	6.0	6.5
4	11.5	9.0	10.0	12.5	10.5	11.5	13.0	10.5	11.5	6.5	5.0	5.5
5	12.5	11.0	11.5	12.5	11.0	11.5	13.0	12.0	12.5	7.0	5.0	6.0
6	12.5	11.0	11.5	11.0	10.5	10.5	13.0	12.5	13.0	8.0	6.5	7.0
7	12.0	10.5	11.0	12.0	11.0	11.0	13.0	11.5	12.0	8.5	7.5	8.0
8	10.5	9.5	10.0	12.0	11.0	11.5	11.5	10.5	11.0	8.5	8.0	8.0
9	11.5	9.5	10.5	12.0	11.0	11.5	10.5	10.0	10.5	8.5	7.5	8.0
10	11.0	10.0	10.5	11.5	10.5	11.0	11.0	10.0	10.5	8.5	7.5	8.0
11	10.0	9.0	9.0	11.0	10.0	10.5	13.0	11.0	11.5	8.0	7.5	8.0
12	10.0	8.5	9.0	10.5	10.0	10.0	13.0	12.0	12.5	8.0	6.5	7.0
13	11.0	9.5	10.0	11.5	10.0	10.5	12.0	10.5	11.0	6.5	6.0	6.5
14	11.5	10.0	10.5	13.0	11.0	11.5	11.0	10.0	10.5	7.5	6.5	7.0
15	12.0	10.0	11.0	13.0	11.5	12.0	11.0	10.0	10.5	8.5	7.5	8.0
16	12.0	10.5	11.0	12.0	10.5	11.0	10.0	9.0	9.5	8.5	8.0	8.5
17	12.0	10.0	11.0	12.0	11.0	11.5	10.5	9.5	10.0	8.5	8.0	8.5
18	10.0	8.5	9.0	13.0	11.0	12.0	10.5	10.0	10.0	8.5	7.5	7.5
19	8.5	8.0	8.5	14.0	12.5	13.0	11.0	10.0	10.0	7.5	6.0	6.5
20	8.5	7.5	7.5	14.0	12.5	13.5	11.0	10.0	10.5	6.5	5.5	6.0
21	9.0	7.0	7.5	14.5	13.0	13.5	10.5	9.0	9.5	6.5	5.5	6.0
22	10.5	8.5	9.5	14.5	12.5	13.5	10.0	8.5	9.0	6.5	6.0	6.5
23	12.0	10.0	11.0	14.5	13.0	13.5	10.5	9.5	10.0	7.0	6.0	6.5
24	12.0	11.0	11.5	14.0	13.0	13.5	11.0	9.5	10.0	7.5	7.0	7.0
25	11.0	10.5	10.5	14.0	12.0	12.5	11.0	10.0	10.0	7.0	6.5	7.0
26	11.5	10.0	10.5	13.0	11.5	12.0	11.0	9.0	10.0	7.0	6.5	6.5
27	12.0	11.0	11.5	12.5	11.0	11.5	11.0	9.5	10.0	7.0	6.0	6.5
28	12.0	11.0	11.5	11.5	10.5	11.0	10.0	9.0	9.5	7.0	6.0	6.5
29	11.0	10.0	10.5	11.0	10.0	10.5	10.5	9.5	10.0	6.5	5.5	6.0
30	10.0	9.5	9.5	11.5	10.0	10.5	10.5	10.0	10.5	7.0	6.5	6.5
31	---	---	---	12.5	11.0	11.5	11.5	10.0	10.5	---	---	---
MONTH	12.5	7.0	10.0	14.5	8.5	11.5	13.0	8.5	10.5	11.5	5.0	7.0
YEAR	14.5	.0										

15294410 CAPPS CREEK BELOW NORTH CAPPS CREEK NEAR TYONEK

LOCATION.--Lat 61°19'45", long 151°39'56", in SE¼SE¼ sec.6, T.14 N., R.13 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 1.2 mi (1.9 km) downstream from North Capps Creek, about 2 mi (3 km) upstream from mouth, and 25 mi (40 km) northwest of Tyonek.

DRAINAGE AREA.--10.5 mi^2 (27.2 km^2).

PERIOD OF RECORD.--July 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 520 ft (160 m), from topographic map.

REMARKS.--Records good except those for Nov. 14 to June 4 and July 7 to Sept. 30, which are poor. Several observations of water temperature were made during the year.

EXTREMES FOR CURRENT PERIOD.--July to September 1979: Maximum discharge during period, 416 ft^3/s (11.8 m^3/s) Sept. 14, gage height, 6.11 ft (1.862 m); minimum daily, 9.2 ft^3/s (0.26 m^3/s) Sept. 9-12.

Water year 1980: Maximum discharge, 710 ft^3/s (20.1 m^3/s) June 25, gage height, 6.95 ft (2.118 m); minimum daily. about 6.5 ft^3/s (0.18 m^3/s) Feb. 24 to Mar. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, JULY TO SEPTEMBER 1979
MEAN VALUES

DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	JUL	AUG	SEP
1	20	16	9	40	9.2	17	102	51	25	---	26	99
2	17	16	10	107	9.2	18	71	148	26	47	24	131
3	16	13	11	45	9.2	19	73	211	27	38	22	131
4	13	12	12	35	9.2	20	60	164	28	30	20	141
5	13	10	13	37	12	21	44	134	29	24	18	81
6	16	10	14	133	217	22	37	231	30	22	18	71
7	23	10	15	125	249	23	32	216	31	24	16	---
8	26	10	16	210	81	24	30	175				

AUGUST	TOTAL - 1469	MEAN - 47.4	MAX - 210	MIN -13	CFSM - 4.51	IN. - 5.20	AC-FT - 2910
SEPTEMBER	TOTAL - 2676.8	MEAN - 89.2	MAX - 249	MIN - 9.2	CFSM - 8.50	IN. - 9.48	AC-FT - 5310

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	45	32	8.0	7.0	6.5	9.5	100	290	223	85	38
2	137	55	28	8.0	7.0	6.5	10	125	260	196	95	31
3	196	48	25	8.0	7.0	6.5	10	95	230	196	140	25
4	190	31	21	8.0	7.0	6.5	10	125	270	170	95	23
5	360	58	19	8.0	7.0	6.5	9.5	140	338	241	82	22
6	248	61	17	8.0	7.0	6.5	9.5	160	486	341	80	20
7	131	128	15	8.0	7.0	6.5	9.5	170	487	250	78	22
8	219	213	14	8.0	7.0	6.5	9.5	190	345	180	170	26
9	357	227	14	8.0	7.0	6.5	9.5	210	281	140	220	34
10	203	178	13	8.0	7.0	6.5	10	220	308	110	140	32
11	352	241	12	8.0	7.0	6.5	11	180	300	280	100	31
12	206	123	12	8.0	7.0	6.5	11	160	257	370	70	57
13	148	90	11	8.0	7.0	7.0	12	150	265	200	60	123
14	88	70	11	8.0	7.0	7.0	13	140	278	138	55	140
15	78	75	10	8.0	7.0	7.0	14	160	262	120	70	83
16	68	66	10	7.5	7.0	7.0	16	140	234	115	110	61
17	68	58	10	7.5	7.0	7.0	18	130	218	110	70	52
18	71	68	10	7.5	7.0	7.0	19	140	228	110	80	46
19	66	80	9.5	7.5	7.0	7.0	21	170	257	125	50	43
20	70	72	9.5	7.5	7.0	7.0	24	200	464	130	35	40
21	54	65	9.5	7.5	7.0	7.0	28	250	302	140	110	61
22	34	54	9.0	7.5	7.0	7.0	40	190	244	110	80	74
23	32	40	9.0	7.5	7.0	7.0	52	160	269	100	60	66
24	34	27	9.0	7.5	6.5	7.5	58	190	286	116	45	76
25	35	32	8.5	7.5	6.5	7.5	62	240	500	100	32	60
26	38	28	8.5	7.5	6.5	7.5	68	220	316	90	25	78
27	36	25	8.5	7.5	6.5	7.5	72	210	281	130	22	72
28	36	27	8.5	7.5	6.5	8.0	78	250	239	100	25	56
29	60	36	8.5	7.5	6.5	8.0	84	240	213	110	28	45
30	81	38	8.0	7.5	---	8.5	92	420	313	130	32	80
31	58	---	8.0	7.0	---	9.0	---	350	---	110	51	---
TOTAL	3860	2359	398.0	239.5	200.0	218.5	890.0	5825	9021	4981	2395	1617
MEAN	125	78.6	12.8	7.73	6.90	7.05	29.7	188	301	161	77.3	53.9
MAX	360	241	32	8.0	7.0	9.0	92	420	500	370	220	140
MIN	32	25	8.0	7.0	6.5	6.5	9.5	95	213	90	22	20
CFSM	11.9	7.49	1.22	.74	.66	.67	2.83	17.9	28.7	15.3	7.36	5.13
IN.	13.67	8.36	1.41	.85	.71	.77	3.15	20.64	31.96	17.65	8.48	5.73
AC-FT	7660	4680	789	475	397	433	1770	11550	17890	9880	4750	3210

WTR YR 1980 TOTAL 32004.0 MEAN 87.4 MAX 500 MIN 6.5 CFSM 8.32 IN 113.37 AC-FT 63480

NOTE.--No gage-height record Nov. 26 to June 4 and July 7 to Aug. 29.

15295600 TERROR RIVER NEAR KODIAK

LOCATION.--Lat 57°39'10", long 153°01'30", in NE¼ sec.19, T.29 S., R.23 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank at outlet of Terror Lake 8 mi (13 km) upstream from Terror Bay and 25 mi (40 km) southwest of Kodiak.

DRAINAGE AREA.--15.0 mi^2 (38.8 km^2).

PERIOD OF RECORD.--June 1962 to September 1968, July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,230 ft (375 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Dec. 6 to Apr. 11, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--8 years (water years 1963-68, 1979-80), 138 ft^3/s (3.908 m^3/s), 124.93 in/yr (3,173 mm/yr), 99,980 acre-ft/yr (123 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,590 ft^3/s (130 m^3/s) Aug. 29, 1963, gage height, 5.92 ft (1.804 m), from rating curve extended above 700 ft^3/s (19.8 m^3/s) on basis of velocity-area study; minimum daily, 8.0 ft^3/s (0.23 m^3/s) Mar. 13-24, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 2	1000	1,780	50.4	3.98	1.213	June 6	2000	1,190	33.7	3.21	0.978
Oct. 4	1400	1,260	35.7	3.30	1.006	Sept.26	0630	*2,820	79.9	*5.55	1.692
Oct. 15	1130	2,030	57.5	4.33	1.320						

Minimum daily discharge, about 15 ft^3/s (0.4 m^3/s) Mar. 16-29 and Apr. 5-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	622	112	64	20	20	18	18	22	236	315	213	148
2	1290	128	54	20	20	18	16	22	278	390	193	127
3	594	111	52	20	20	18	16	28	550	400	213	93
4	905	93	45	20	20	18	16	40	1010	390	206	70
5	532	83	42	20	25	18	15	46	980	526	220	58
6	282	155	38	20	25	18	15	59	1140	526	244	49
7	210	330	35	20	30	18	15	69	790	400	206	65
8	774	310	35	20	30	18	15	93	484	330	164	167
9	636	220	30	20	30	18	15	106	394	282	196	141
10	520	180	30	20	30	18	15	108	496	310	174	119
11	514	174	30	20	25	18	15	95	514	601	155	118
12	432	150	30	20	25	18	15	89	416	550	123	210
13	274	118	30	20	25	18	15	86	385	395	101	310
14	283	93	25	20	25	18	15	83	400	345	92	305
15	1450	90	25	25	25	18	15	86	400	320	112	315
16	622	87	25	25	25	15	16	111	340	278	137	244
17	370	76	25	25	20	15	18	137	300	252	144	164
18	264	65	25	30	20	15	20	125	287	252	148	123
19	193	64	25	30	20	15	19	98	315	274	128	95
20	150	61	25	30	20	15	18	80	427	278	109	78
21	121	55	25	30	20	15	18	77	432	292	93	77
22	111	50	25	30	20	15	17	89	432	264	81	78
23	96	48	25	25	20	15	16	106	400	248	70	70
24	84	45	25	25	20	15	16	148	478	260	64	64
25	74	45	25	25	20	15	16	189	622	244	65	168
26	65	50	25	25	20	15	16	296	594	264	65	1980
27	60	55	25	25	20	15	17	305	508	244	70	601
28	55	77	25	20	20	15	17	224	416	244	68	478
29	61	89	25	20	20	15	18	224	330	244	69	520
30	104	76	25	20	---	16	22	278	300	252	84	315
31	99	---	25	20	---	16	---	278	---	232	119	---
TOTAL	11847	3290	965	710	660	512	495	3797	14654	10202	4126	7350
MEAN	382	110	31.1	22.9	22.8	16.5	16.5	122	488	329	133	245
MAX	1450	330	64	30	30	18	22	305	1140	601	244	1980
MIN	55	45	25	20	20	15	15	22	236	232	64	49
CFSM	25.5	7.33	2.07	1.53	1.52	1.10	1.10	8.13	32.5	21.9	8.87	16.3
IN.	29.38	8.16	2.39	1.76	1.64	1.27	1.23	9.42	36.34	25.30	10.23	18.23
AC-FT	23500	6530	1910	1410	1310	1020	982	7530	29070	20240	8180	14580

CAL YR 1979 TOTAL 62547 MEAN 171 MAX 1450 MIN 10 CFSM 11.4 IN 155.11 AC-FT 124100
WTR YR 1980 TOTAL 58608 MEAN 160 MAX 1980 MIN 15 CFSM 10.7 IN 145.34 AC-FT 116200

15296545 EAST FORK UPPER THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°19'51", long 153°55'22", in NW¼SE¼ sec.8, T.33 S., R.29 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank about 500 ft (150 m) upstream from fish research camp 2.5 mi (4.0 km) upstream from confluence with North Fork and 15 mi (24 km) south of Larsen Bay.

DRAINAGE AREA.--8.99 mi² (23.2 km²).

PERIOD OF RECORD.--Water year 1979 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1979 to current year.

INSTRUMENTATION.--Temperature recorder since May 17, 1979.

REMARKS.--No record July 9 to Aug 19 due to recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 12.5°C Aug. 3, 1979; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 11.0°C Aug. 24; minimum, 0.0°C on many days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	6.5	4.0	3.5	2.0	1.0	.0	.0	---	---	2.0	.0
2	7.0	6.0	3.5	2.5	2.0	1.5	.0	.0	---	---	2.5	1.0
3	6.0	6.0	3.5	2.5	2.0	1.0	.0	.0	---	---	2.5	.5
4	6.5	6.0	3.5	3.0	2.0	1.5	.0	.0	---	---	3.0	1.0
5	6.5	6.0	4.0	3.0	1.5	.5	.0	.0	---	---	3.0	1.5
6	6.0	5.5	4.0	4.0	1.5	.5	.0	.0	---	---	3.0	1.5
7	5.5	5.0	4.5	4.0	.5	.5	.5	.0	.5	.0	2.0	1.0
8	---	---	4.5	4.5	.5	.0	---	---	1.5	.5	3.0	.0
9	---	---	4.5	3.5	1.5	.0	---	---	1.5	.5	2.0	.0
10	---	---	4.5	4.5	2.0	.0	---	---	2.0	.0	2.5	1.0
11	---	---	4.5	3.5	.0	.0	---	---	1.0	.0	2.0	.0
12	---	---	3.5	3.0	.0	.0	---	---	2.0	1.0	.5	.0
13	---	---	3.5	2.5	.0	.0	---	---	1.5	1.0	.5	.0
14	---	---	3.0	2.0	.0	.0	---	---	1.0	.5	.0	.0
15	---	---	3.5	2.5	.0	.0	---	---	1.0	.0	.0	.0
16	---	---	2.5	2.0	.5	.0	---	---	.0	.0	.5	.0
17	---	---	2.5	2.0	1.0	.0	---	---	.0	.0	.0	.0
18	5.0	4.0	2.0	1.5	.0	.0	---	---	.5	.0	.5	.0
19	4.5	4.0	2.0	1.5	.0	.0	---	---	1.5	.5	2.5	.5
20	5.0	4.0	2.0	1.0	.0	.0	---	---	1.0	.5	1.5	.5
21	5.0	4.0	2.0	.5	.0	.0	---	---	.5	.0	2.5	.5
22	4.0	3.5	2.0	.5	.0	.0	---	---	1.0	.0	3.5	1.0
23	3.5	3.0	1.5	.0	.0	.0	---	---	1.5	.0	2.0	1.5
24	3.5	2.5	1.0	.0	.0	.0	---	---	1.5	.0	3.5	.5
25	4.0	2.5	1.5	.5	.0	.0	---	---	2.5	1.0	3.5	1.0
26	4.0	3.5	1.0	.0	.0	.0	---	---	2.0	.5	2.0	.5
27	3.5	2.0	2.0	1.0	.0	.0	---	---	2.0	.5	4.0	1.0
28	4.0	2.0	2.0	2.0	.0	.0	---	---	2.0	.0	3.0	.5
29	4.5	3.5	2.5	2.0	.0	.0	---	---	.5	.0	1.0	.0
30	4.0	3.5	2.0	1.0	.0	.0	---	---	---	---	2.0	.5
31	4.0	3.5	---	---	.0	.0	---	---	---	---	2.0	.5
MONTH	7.0	2.0	4.5	.0	2.0	.0		.0	2.5	.0	4.0	.0

15296545 EAST FORK UPPER THUMB RIVER NEAR LARSEN BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.0	.5	6.0	1.5	5.5	2.5	5.5	4.5	---	---	10.0	6.5
2	3.5	.5	5.5	2.0	7.0	2.5	6.5	4.5	---	---	8.5	4.5
3	4.0	.5	4.0	2.0	5.0	3.5	7.5	4.5	---	---	7.5	4.0
4	3.5	.5	4.5	1.5	5.0	3.0	7.0	4.0	---	---	9.0	5.0
5	3.5	.5	4.0	1.0	5.0	3.5	7.5	5.5	---	---	9.0	4.0
6	5.0	1.5	5.5	1.5	5.5	3.0	6.5	4.5	---	---	8.0	4.0
7	5.0	1.0	5.0	2.0	6.0	2.5	7.5	4.0	---	---	7.5	6.0
8	3.5	.5	6.0	2.0	6.0	2.0	5.5	5.0	---	---	8.5	6.5
9	5.0	1.5	4.0	2.0	6.0	3.5	---	---	---	---	8.0	6.0
10	4.5	.5	3.0	2.0	4.5	3.0	---	---	---	---	7.5	5.5
11	5.5	1.0	4.0	2.0	4.5	3.0	---	---	---	---	8.5	5.5
12	2.5	.5	4.0	2.0	5.0	3.0	---	---	---	---	8.5	7.5
13	2.5	.5	4.5	2.0	7.0	3.0	---	---	---	---	9.5	7.5
14	6.0	1.0	5.5	2.0	6.0	3.0	---	---	---	---	9.5	9.0
15	5.5	.5	4.5	2.0	5.5	3.5	---	---	---	---	9.0	8.0
16	6.0	1.5	6.0	2.5	5.5	3.5	---	---	---	---	8.0	7.5
17	5.0	2.0	4.0	2.0	6.0	3.0	---	---	---	---	8.0	7.0
18	3.5	1.5	5.5	2.0	7.5	4.0	---	---	---	---	8.0	6.0
19	6.0	1.0	6.0	1.5	5.5	3.0	---	---	---	---	7.5	5.5
20	4.5	.5	6.5	2.0	6.5	3.5	---	---	7.5	7.0	8.0	6.5
21	4.0	.5	8.0	2.5	6.5	3.5	---	---	9.5	6.5	8.0	7.0
22	6.5	1.0	5.0	2.0	6.0	3.5	---	---	10.0	5.0	7.0	6.5
23	5.5	1.5	4.0	2.5	7.5	3.0	---	---	8.0	6.0	7.0	6.5
24	5.0	1.0	5.5	2.5	5.0	4.0	---	---	11.0	6.5	7.0	6.0
25	6.0	1.0	5.5	2.5	5.0	4.0	---	---	10.5	5.0	8.0	6.0
26	4.5	2.0	3.5	2.5	6.5	4.0	---	---	10.0	5.5	8.0	6.5
27	5.5	2.0	4.0	2.0	7.5	3.5	---	---	9.0	7.5	6.5	6.0
28	7.0	2.0	5.5	2.5	6.0	4.0	---	---	10.0	7.5	6.0	6.0
29	4.5	2.0	4.5	2.5	8.0	4.0	---	---	8.5	7.5	6.5	6.0
30	3.5	2.0	4.5	2.5	8.5	2.0	---	---	9.0	6.5	6.0	5.5
31	---	---	6.0	2.0	---	---	---	---	8.5	7.0	---	---
MONTH	7.0	.5	8.0	1.0	8.5	2.0					10.0	4.0

15296550 UPPER THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°21'03", long 153°58'04", in NE¼NE¼ sec.1, T.33 S., R.30 W., Kodiak Island Borough, Hydrologic Unit 19050001, Kodiak National Wildlife Refuge, on Kodiak Island, on right bank 0.2 mi (0.3 km) downstream from confluence of East and North Forks, 0.3 mi (0.5 km) upstream from mouth at Thumb Lake, and 13 mi (21 km) south of Larsen Bay.

DRAINAGE AREA.--18.8 mi^3 (48.7 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (116 m), from topographic map.

REMARKS.--Water-discharge records poor for period of no gage-height record prior to May 18, fair thereafter.

AVERAGE DISCHARGE.--6 years, 93.0 ft^3/s (2.634 m^3/s), 67.17 in/yr (1,706 mm/yr), 67,380 acre-ft/yr (83.1 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 867 ft^3/s (24.6 m^3/s), revised, June 16, 1977, gage height, 3.24 ft (0.988 m); minimum, 8.1 ft^3/s (0.23 m^3/s) Mar. 19 and Apr. 3, 1975, gage height, 0.53 ft (0.162 m).

EXTREMES FOR CURRENT YEAR.--Peaks above base of 400 ft^3/s (11 m^3/s), revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 5	0800	*796	22.5	*3.11	0.948
Oct. 15	1100	505	14.3	2.85	0.869
Nov. 6	1600	515	14.6	2.85	0.869
Nov. 10	1300	525	14.9	2.87	0.875
June 6	Unknown	580	16.4	a3.00	0.914

a From floodmarks.

Minimum daily discharge, 19 ft^3/s (0.54 m^3/s) Sept. 6-8, 10, and 11.

REVISIONS.--The peak discharge and annual maximum (*) for water years 1974-79 have been revised as shown in the following table. They supersede figures published in reports for 1975-79.

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Sept.25, 1974	0500	b470	13.3	2.49	0.759
June 22, 1975	2400	408	11.6	2.35	0.716
June 29, 1975	0100	*652	18.5	*2.85	0.869
Oct. 23, 1975	0100	505	14.3	2.56	0.780
June 5, 1976	2100	490	13.9	2.53	0.771
Sept.18, 1976	0630	*680	19.3	*2.90	0.884
Oct. 17, 1976	0600	490	13.9	2.53	0.771
Jan. 4, 1977	1200	416	11.8	2.36	0.719
May 18,1977	0300	416	11.8	2.36	0.719
June 11, 1977	0600	500	14.2	2.65	0.808
June 16, 1977	2330	*867	24.6	*3.24	0.988
Oct. 9, 1977	0800	575	16.3	2.70	0.823
May 23, 1978	2230	439	12.4	2.40	0.732
June 14, 1978	1530	540	15.3	2.63	0.802
June 19, 1978	0430	*652	18.5	*2.85	0.869
Sept.14, 1978	Unknown	Unknown		Unknown	
June 1, 1979	0400	*408	11.6	*2.35	0.716

b Peak discharge for the period July through September 1974.

Revised daily discharge, in cubic feet per second, for high-water periods in September 1974 and water years 1975-79 are given below. They supersede those published in reports for 1975-79.

Sept.25, 1974	344
June 9, 1975	234
10	223
11	212
12	209
13	212
14	202
15	206
16	254
17	244
18	308
19	328
20	272
21	308
22	372
23	344
24	276
25	258
26	254
27	308
28	416
June 29, 1975	560
30	367
July 1	276
2	258
3	282
4	254
5	230
6	240
7	265
8	254
9	248
10	251
11	237
12	212
June 5, 1976	398
6	394
7	304
Sept.18	560
Oct. 17, 1976	444
Jan. 4, 1977	358
May 18, 1977	390
June 2	244
3	308
4	344
5	344
6	320
7	293
8	380
9	452
10	495
11	535
12	480
13	434
14	470
15	520
16	800
17	750
18	600
May 23, 1978	336
24	349
25	282
May 26, 1978	254
June 14	439
15	394
16	290
17	416
18	595
19	610
20	485
21	457
22	545
23	434
24	349
25	312
26	282
27	254
May 28, 1979	251
29	272
30	268
31	304
June 1	354
2	282
3	240

15296550 UPPER THUMB RIVER NEAR LARSEN BAY--Continued

Monthly	Cfs-day	Mean	Maximum	Minimum	Per square mile	Runoff in Inches	Runoff in Acre-feet
September 1974	2,647	88.2	344	35	4.69	5.24	5,250
June 1975	8,004	267	560	173	14.2	15.84	15,880
July 1975	5,129	165	282	70	8.78	10.15	10,170
WTR YR 1975	28,221.6	77.3	560	8.5	4.11	55.84	55,980
CAL YR 1975	28,337.6	77.6	560	8.5	4.13	56.07	56,210
June 1976	6,141	205	398	147	10.9	12.15	12,180
September 1976	4,293	143	560	25	7.61	8.49	8,520
WTR YR 1976	27,033.0	73.9	560	11	3.93	53.49	53,620
October 1976	4,162	134	444	63	7.13	8.24	8,260
CAL YR 1976	29,970	81.9	560	11	4.36	59.30	59,450
January 1977	3,325	107	358	38	5.69	6.58	6,600
May 1977	4,269	138	390	68	7.34	8.45	8,470
June 1977	12,864	429	800	205	22.8	25.45	25,520
WTR YR 1977	44,483	122	800	28	6.49	88.01	88,230
CAL YR 1977	40,001	110	800	12	5.85	79.15	79,340
May 1978	6,342	205	349	98	10.9	12.55	12,580
June 1978	9,629	321	610	205	17.1	19.05	19,100
WTR YR 1978	34,761	95.2	800	12	5.06	68.78	68,950
CAL YR 1978	40,322	110	800	12	5.85	79.78	79,980
May 1979	4,883	158	304	115	8.40	9.66	9,690
June 1979	5,124	171	354	83	9.10	10.14	10,160
WTR YR 1979	32,428	88.8	354	12	4.72	64.16	64,320

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	198	77	25	25	27	63	75	200	170	45	23
2	503	188	75	25	25	27	48	81	250	182	44	22
3	444	133	71	25	25	27	53	97	250	170	42	21
4	485	108	67	25	25	26	44	100	300	155	40	21
5	607	92	63	25	25	26	39	101	400	205	37	20
6	390	379	59	30	27	26	36	97	580	178	37	19
7	268	410	55	25	28	28	34	103	500	152	38	19
8	268	350	55	25	32	27	33	108	400	138	37	19
9	289	292	50	25	54	25	33	110	300	124	38	20
10	244	490	60	25	56	25	33	110	250	172	36	19
11	240	398	50	25	60	24	34	120	250	289	34	19
12	254	282	50	20	70	22	34	130	200	205	31	27
13	205	216	50	20	80	22	32	135	200	170	30	144
14	200	175	40	20	77	22	32	124	180	148	29	225
15	416	266	40	20	68	22	30	118	180	131	29	216
16	346	216	40	20	58	22	31	118	170	120	30	155
17	278	180	40	25	53	22	33	133	170	110	30	120
18	213	150	40	30	52	21	32	127	160	103	31	93
19	175	129	40	30	48	21	31	112	180	95	32	78
20	140	110	40	40	42	25	30	106	200	86	30	70
21	124	95	30	35	36	23	31	116	198	80	29	77
22	110	86	30	35	36	22	34	129	190	74	27	83
23	95	75	30	30	43	23	34	129	237	70	26	100
24	85	68	30	30	36	22	33	130	216	65	26	86
25	77	71	30	30	34	22	35	150	258	64	25	95
26	70	63	30	30	32	25	39	150	240	60	24	216
27	63	75	30	30	31	24	44	170	205	57	24	200
28	60	160	30	30	29	23	53	180	190	54	23	175
29	80	112	30	30	27	24	60	180	172	57	22	162
30	145	93	30	25	---	32	71	200	170	52	23	131
31	129	---	30	25	---	93	---	200	---	49	25	---
TOTAL	7198	5660	1392	835	1234	820	1169	3939	7396	3785	974	2675
MEAN	232	189	44.9	26.9	42.6	26.5	39.0	127	247	122	31.4	89.2
MAX	607	490	77	40	80	93	71	200	580	289	45	225
MIN	60	63	30	20	25	21	30	75	160	49	22	19
CFSM	12.3	10.1	2.39	1.43	2.27	1.41	2.07	6.76	13.1	6.49	1.67	4.75
IN.	14.24	11.20	2.75	1.65	2.44	1.62	2.31	7.79	14.63	7.49	1.93	5.29
AC-FT	14280	11230	2760	1660	2450	1630	2320	7810	14670	7510	1930	5310

CAL YR 1979 TOTAL 36908 MEAN 101 MAX 607 MIN 12 CFSM 5.37 IN 73.03 AC-FT 73210
WTR YR 1980 TOTAL 37077 MEAN 101 MAX 607 MIN 19 CFSM 5.37 IN 73.36 AC-FT 73540

NOTE.--No gage-height record Dec. 7 to Feb. 6.

15296550 UPPER THUMB RIVER NEAR LARSEN BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1974 to July 1978 and May 1979 to current year.

INSTRUMENTATION.--Temperature recorder July 27, 1974 to July 25, 1978 and May 18 to Sept. 30, 1980.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross-section on Oct. 18, Dec. 6, May 14, and June 18. A maximum variation of 0.2°C was found within the cross section. Missing record, Dec. 7 to Feb. 8, due to clock stoppage.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 14.0°C Aug. 16, 1974; minimum, 0.0°C Feb. 22-25, 1978 and probably at other times during winter-time periods of missing record.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 12.5°C Aug. 5; minimum observed, 0.5°C several days in February, but it probably was 0.0°C at times during period of missing record.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT							
18...	1340	50	--	234	5.5	4	2.5
18...	1341	--	4.0	--	5.3	--	--
18...	1342	--	12	--	5.3	--	--
18...	1343	--	22	--	5.3	--	--
18...	1344	--	30	--	5.3	--	--
18...	1345	--	38	--	5.3	--	--
18...	1346	--	46	--	5.3	--	--
DEC							
06...	1240	44	--	60	1.5	1	.16
06...	1241	--	10	--	1.4	--	--
06...	1242	--	20	--	1.4	--	--
06...	1243	--	30	--	1.5	--	--
06...	1244	--	40	--	1.5	--	--
06...	1245	--	45	--	1.5	--	--
MAY							
14...	1600	50	47	135	5.2	--	--
14...	1601	--	40	--	5.2	--	--
14...	1602	--	30	--	5.2	--	--
14...	1603	--	20	--	5.2	--	--
14...	1604	--	10	--	5.2	--	--
14...	1605	--	1.0	--	5.2	--	--
JUN							
18...	1816	44	2.0	175	7.4	--	--
18...	1817	--	10	--	7.5	--	--
18...	1818	--	18	--	7.5	--	--
18...	1819	--	26	--	7.6	--	--
18...	1820	--	34	--	7.6	--	--

15296550 UPPER THUMB RIVER NEAR LARSEN BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	6.5	4.0	4.0	2.5	2.0			---	---	1.5	1.5
2	6.5	6.5	4.0	3.0	2.5	2.5			---	---	2.5	1.5
3	6.5	6.0	4.0	3.0	2.5	2.0			---	---	2.5	1.5
4	6.5	6.0	4.0	3.5	2.5	2.5			---	---	3.0	1.5
5	6.5	6.0	4.5	3.5	2.5	2.0			---	---	3.0	2.0
6	6.0	6.0	4.5	4.5	1.5	1.5			---	---	3.0	2.0
7	6.0	5.0	5.0	4.5	---	---			1.0	1.0	2.5	2.0
8	7.0	5.5	5.0	5.0	---	---			1.0	1.0	3.0	1.5
9	7.0	6.5	5.0	4.5	---	---			1.0	1.0	2.5	1.0
10	6.5	5.5	5.0	5.0	---	---			1.5	1.0	2.5	1.5
11	5.5	5.5	5.0	4.5	---	---			1.0	.5	2.5	1.0
12	6.0	5.5	4.5	4.0	---	---			1.5	.5	1.5	1.0
13	6.0	5.5	4.0	3.0	---	---			1.5	1.0	1.5	1.0
14	6.0	5.5	3.0	3.0	---	---			1.0	1.0	1.5	1.0
15	6.0	5.5	4.0	3.0	---	---			1.0	1.0	1.5	1.0
16	5.5	5.5	3.0	2.5	---	---			1.0	.5	1.5	1.0
17	5.5	5.0	3.0	2.5	---	---			1.0	.5	1.0	1.0
18	5.5	5.0	2.5	2.0	---	---			.5	.5	2.0	1.0
19	5.0	4.5	2.5	2.0	---	---			1.0	.5	2.5	1.5
20	5.0	4.5	2.5	2.0	---	---			1.0	1.0	1.5	1.5
21	5.0	4.5	2.5	1.5	---	---			1.0	.5	3.0	1.0
22	4.5	4.5	2.0	1.5	---	---			.5	.5	3.5	1.5
23	4.0	3.5	2.0	1.5	---	---			1.5	.5	2.5	2.0
24	4.0	3.0	1.5	1.5	---	---			1.5	.5	3.0	1.5
25	4.0	3.0	2.0	1.5	---	---			2.0	1.5	4.0	1.5
26	4.5	4.0	1.5	1.5	---	---			2.0	1.0	2.5	1.5
27	4.0	2.5	2.5	1.5	---	---			2.0	1.0	3.5	1.5
28	4.0	2.5	2.5	2.0	---	---			2.0	1.0	3.0	1.0
29	4.5	4.0	3.0	2.5	---	---			1.0	1.0	2.0	1.0
30	4.5	4.0	3.0	2.0	---	---			---	---	2.0	1.0
31	4.0	4.0	---	---	---	---			---	---	1.5	1.0
MONTH	7.0	2.5	5.0	1.5					2.0		4.0	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.5	1.0	5.0	2.0	6.0	3.5	7.0	6.0	8.5	7.5	10.5	7.5
2	3.5	1.0	5.5	2.5	7.5	3.5	7.0	6.0	9.5	7.5	9.0	6.0
3	2.0	1.0	4.5	2.0	6.0	4.5	7.5	6.0	11.0	7.5	8.0	5.5
4	3.5	1.0	5.0	2.0	5.5	4.5	7.0	6.0	12.0	7.5	9.0	5.5
5	3.0	1.0	4.0	1.5	5.5	4.5	8.0	7.0	12.5	9.0	9.0	5.0
6	5.0	1.5	5.0	2.0	6.0	4.5	7.5	6.5	11.5	8.5	8.0	5.5
7	5.0	1.0	5.0	2.0	6.5	4.0	7.0	6.0	9.0	8.0	8.0	6.5
8	3.5	1.0	5.0	2.5	6.5	3.5	7.5	6.0	9.5	8.0	9.0	7.0
9	5.0	2.0	4.5	2.0	6.5	4.5	7.0	6.0	9.0	7.5	8.0	7.0
10	5.0	1.0	4.0	2.0	5.5	4.5	7.0	6.0	9.5	7.5	8.0	6.0
11	5.0	2.0	4.5	2.5	5.5	5.0	7.0	7.0	8.0	7.0	8.0	6.5
12	3.0	1.0	4.0	2.5	6.0	5.0	7.5	7.5	9.0	7.0	8.5	7.5
13	2.5	1.0	4.5	2.5	7.0	5.0	8.0	7.0	7.5	6.0	9.5	8.0
14	5.5	1.5	5.0	2.5	7.0	5.0	8.5	7.5	8.5	7.0	9.5	9.5
15	5.0	1.0	4.5	2.5	7.0	5.5	9.0	7.5	9.0	7.5	9.5	8.5
16	5.0	2.0	6.0	3.0	6.5	5.0	9.0	6.0	8.5	7.5	8.5	8.0
17	4.5	2.0	4.0	2.5	6.5	5.0	9.0	6.0	8.5	7.5	8.5	7.5
18	3.5	2.0	5.5	2.5	7.5	5.5	9.0	6.0	8.0	7.5	8.0	6.5
19	5.0	1.5	5.5	2.0	6.0	5.0	10.5	7.0	8.5	7.5	8.0	6.0
20	3.5	1.0	6.0	3.0	6.5	5.0	11.5	6.5	8.0	7.0	8.5	7.0
21	4.0	1.5	7.5	3.0	6.0	5.0	11.5	7.0	10.0	7.0	8.0	7.5
22	6.0	1.5	5.0	2.5	6.5	5.0	11.5	7.5	10.0	6.0	7.5	7.0
23	5.5	2.0	4.5	3.0	6.0	4.5	11.5	7.5	8.0	6.5	7.5	7.0
24	5.5	2.0	6.5	3.5	6.0	5.5	12.0	8.0	10.5	7.0	7.5	6.5
25	6.0	1.5	5.5	3.5	5.5	5.0	11.0	8.0	10.5	6.0	8.0	6.5
26	4.5	2.5	4.5	3.5	6.5	5.0	11.0	7.5	10.0	6.0	8.0	7.0
27	5.0	2.0	4.5	3.0	7.5	5.5	9.5	8.0	8.5	8.0	7.0	6.5
28	7.0	2.5	6.0	3.5	6.5	5.5	11.0	7.5	9.5	7.5	6.5	6.5
29	4.5	2.0	5.0	3.5	8.0	5.5	9.0	8.0	8.5	7.5	7.0	6.5
30	4.0	2.5	5.5	3.5	8.5	5.5	8.0	7.5	9.0	7.0	7.0	6.5
31	---	---	7.0	3.0	---	---	8.5	7.5	9.0	7.5	---	---
MONTH	7.0	1.0	7.5	1.5	8.5	3.5	12.0	6.0	12.5	6.0	10.5	5.0
YEAR	12.5											

15296554 THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°21'26", long 153°59'41", in NW¼SE¼ sec.31, T.32 S., R.29 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank 600 ft (180 m) upstream from mouth, 0.2 mi (0.3 km) downstream from Salmon Creek, and 12.5 mi (20.1 km) south of Larsen Bay.

DRAINAGE AREA.--25.3 mi^2 (65.5 km^2).

PERIOD OF RECORD.--Water year 1979 and current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1979 to current year.

INSTRUMENTATION.--Temperature recorder since June 29, 1979.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at sensor was compared with temperature from cross-sections on Dec. 6, Mar. 27, May 14, June 18, and Aug. 20. Maximum variation was found on Aug. 20 at left bank where temperature was 2.0°C colder than at sensor. Water temperature is influenced by colder water from Salmon Creek, a left bank tributary 300 ft (90 m) downstream from Thumb Lake. Discharge measurements made during the year are listed with those made at miscellaneous sites.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.0°C Aug. 25, 1979; minimum, 0.0°C on several days during winter.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 18.0°C July 26; minimum, 0.0°C on several days during winter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)
DEC					
06...	1000	61	--	76	--
06...	1001	--	2.0	--	1.3
06...	1002	--	12	--	1.0
06...	1003	--	22	--	1.1
06...	1004	--	32	--	1.3
06...	1005	--	42	--	1.3
06...	1006	--	52	--	1.3
06...	1007	--	60	--	1.4
MAR					
27...	1315	51	--	29	--
27...	1316	--	2.0	--	4.6
27...	1317	--	12	--	4.0
27...	1318	--	22	--	3.8
27...	1319	--	32	--	3.8
27...	1320	--	42	--	3.8
27...	1321	--	50	--	4.3
MAY					
14...	1156	90	81	173	6.5
14...	1157	--	73	--	6.0
14...	1158	--	67	--	6.0
14...	1159	--	61	--	6.0
14...	1200	--	53	--	5.8
14...	1201	--	43	--	5.5
14...	1202	--	35	--	5.5
14...	1203	--	24	--	5.0
14...	1211	--	23	--	5.0
14...	1212	--	12	--	5.0
14...	1213	--	.0	--	5.0
JUN					
18...	1701	62	1.0	182	7.8
18...	1702	--	8.0	--	7.9
18...	1703	--	13	--	8.0
18...	1704	--	18	--	8.0
18...	1705	--	23	--	8.1
18...	1706	--	28	--	8.2
18...	1707	--	33	--	8.1
18...	1708	--	38	--	8.1
18...	1709	--	43	--	8.1
18...	1710	--	48	--	8.1
18...	1711	--	53	--	8.1
18...	1712	--	58	--	8.2
18...	1713	--	61	--	8.2
AUG					
20...	1745	47	--	44	--
20...	1746	--	3.0	--	8.8
20...	1747	--	8.0	--	9.0
20...	1748	--	18	--	9.5
20...	1749	--	28	--	10.2
20...	1750	--	36	--	10.6
20...	1751	--	44	--	10.6

15296554 THUMB RIVER NEAR LARSEN BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	3.5	3.5	1.5	1.0					---	---
2	---	---	3.5	2.5	1.5	1.0					---	---
3	---	---	3.5	2.5	1.5	1.0					---	---
4	---	---	3.5	2.5	1.5	1.0					---	---
5	---	---	4.0	2.5	1.5	1.0					---	---
6	---	---	4.0	3.5	1.5	.5					---	---
7	---	---	4.5	4.0	1.0	1.0					---	---
8	---	---	4.5	4.5	.5	.0					---	---
9	---	---	4.5	4.0	1.0	.0					---	---
10	---	---	4.5	4.0	1.0	.0					---	---
11	---	---	4.5	4.0	.5	.0					---	---
12	---	---	4.0	3.5	.5	.0					---	---
13	---	---	4.0	3.0	.5	.0					---	---
14	---	---	3.5	2.0	.5	.0					---	---
15	---	---	3.5	2.5	.5	.5					---	---
16	---	---	3.0	2.5	1.0	.5					---	---
17	---	---	2.5	1.5	1.0	.5					---	---
18	---	---	2.0	1.0	.5	.0					---	---
19	5.5	5.0	2.0	1.0	.5	.0					---	---
20	5.0	4.5	1.5	.5	.5	.0					---	---
21	5.5	4.5	1.0	.5	.5	.0					---	---
22	4.5	4.0	1.0	.5	.5	.0					---	---
23	4.5	4.0	1.0	.0	.5	.0					---	---
24	4.5	3.5	.5	.0	.5	.5					---	---
25	4.0	3.5	1.0	.0	1.0	.5					---	---
26	4.0	3.0	.5	.5	.5	.5					---	---
27	4.0	2.5	1.0	.5	1.0	.5					---	---
28	4.0	2.5	1.0	.5	---	---					4.5	1.5
29	4.0	3.0	1.0	1.0	---	---					3.0	2.0
30	4.0	3.5	1.0	1.0	---	---					2.5	1.5
31	3.5	3.0	---	---	---	---					2.5	1.5
MONTH			4.5	.0	1.5	.0						

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.0	1.5	7.0	3.5	7.5	5.5	11.0	10.0	13.0	11.5	13.5	10.0
2	3.5	2.0	5.0	2.0	8.0	6.0	10.5	8.5	13.0	11.0	12.5	9.0
3	3.0	2.0	5.5	3.0	10.0.	7.5	10.0	9.0	14.5	10.5	11.5	8.0
4	3.5	1.5	6.0	4.5	8.5	7.0	11.0	9.5	16.0	12.0	12.5	8.5
5	3.5	1.5	5.5	4.5	7.5	6.0	11.5	10.5	16.5	13.5	12.5	7.5
6	4.0	1.5	6.5	4.5	6.5	5.5	11.0	9.0	17.5	14.5	12.0	8.0
7	4.5	2.0	7.0	4.5	6.5	5.5	10.5	9.0	15.0	14.0	10.5	9.0
8	4.0	2.0	7.0	5.0	7.0	6.0	11.0	9.0	15.5	13.0	11.5	9.0
9	5.5	2.0	6.5	5.0	8.5	7.0	10.5	8.5	15.0	13.0	11.0	9.5
10	5.5	2.5	5.5	4.0	8.5	7.5	11.0	9.5	15.5	13.0	11.5	8.5
11	6.5	3.5	7.0	5.0	7.5	6.0	10.0	9.0	14.0	12.5	11.5	8.5
12	5.0	3.5	5.5	4.0	6.5	5.5	9.5	8.5	14.5	12.0	10.5	9.5
13	5.0	3.0	7.0	5.0	7.0	5.5	10.0	8.5	12.5	11.0	11.5	10.0
14	6.0	2.5	7.0	5.5	8.0	6.0	11.5	9.0	13.0	12.0	11.5	11.0
15	6.5	2.5	7.0	5.0	9.0	7.5	12.0	10.0	13.5	12.5	11.0	10.0
16	7.0	3.5	8.0	5.0	9.0	6.5	12.0	10.0	12.5	11.0	10.5	10.0
17	6.0	4.0	6.5	5.0	8.0	6.5	13.0	10.5	12.0	10.5	10.5	9.5
18	4.5	3.5	7.5	4.5	8.5	7.0	13.5	11.0	11.5	10.0	10.5	9.0
19	7.0	3.5	7.5	5.0	8.0	7.0	14.0	11.5	11.5	10.0	10.5	8.5
20	6.0	3.5	8.0	5.0	9.0	6.0	14.5	11.0	11.0	10.0	10.0	8.5
21	6.0	3.0	8.5	6.0	8.5	6.5	15.5	12.5	12.5	9.5	10.0	9.0
22	7.0	3.5	8.0	6.0	9.0	6.5	16.0	12.5	13.5	8.5	9.0	8.0
23	7.0	3.5	7.5	6.0	10.5	7.0	17.0	14.5	11.5	10.0	9.0	8.0
24	6.5	3.5	8.0	6.0	9.5	8.5	17.5	14.5	14.5	10.5	9.0	8.0
25	8.0	3.5	7.5	6.0	8.5	7.0	17.5	15.5	14.5	9.5	8.5	7.5
26	6.0	4.0	7.0	5.5	8.0	7.0	18.0	15.0	14.0	10.0	8.5	7.5
27	7.0	4.0	6.5	5.5	9.5	7.5	17.0	13.5	13.0	12.0	8.5	7.5
28	8.0	4.5	7.5	5.5	9.0	8.0	16.0	13.5	14.5	11.5	7.5	6.5
29	5.0	2.0	7.0	5.5	10.0	7.5	15.0	13.0	13.0	11.5	7.5	6.5
30	6.0	4.0	6.5	5.5	11.5	9.0	14.0	12.5	13.5	11.5	7.0	6.5
31	---	---	7.0	5.5	---	---	13.0	12.0	12.5	11.0	---	---
MONTH	8.0	1.5	8.5	2.0	11.5	5.5	18.0	8.5	17.5	8.5	13.5	6.5
YEAR	18.0	.0										

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY

LOCATION.--Lat 57°26'37", long 154°06'41", in NW¼SW¼ sec.33, T.31 S., R.30 W., Kodiak Island Borough, Hydrologic Unit 19050001, Kodiak National Wildlife Refuge, Kodiak Island, on right bank 0.3 mi (0.5 km) downstream from Karluk Lake and 5.0 mi (8.0 km) south of Larsen Bay.

DRAINAGE AREA.--100 mi^2 (259 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 to September 1976, October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 360 ft (110 m), from topographic map.

REMARKS.--Water-discharge record good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,760 ft^3/s (49.8 m^3/s) Nov. 11, 1979, gage height, 2.33 ft (0.710 m), affected by seiche; minimum, 84 ft^3/s (2.38 m^3/s) Sept. 16, 1979, gage height, 0.78 ft (0.238 m), affected by seiche.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,760 ft^3/s (49.8 m^3/s) Nov. 11, gage height, 2.33 ft (0.710 m), affected by seiche; minimum, 144 ft^3/s (4.08 m^3/s) Sept. 7, gage height, 0.92 ft (0.280 m), affected by seiche.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	698	687	200	222	234	284	258	768	804	396	200
2	364	744	654	195	222	228	291	277	768	780	396	195
3	483	732	643	185	210	222	305	284	804	756	404	190
4	610	720	610	195	210	210	319	305	938	744	404	180
5	854	744	600	216	205	205	319	319	1110	744	380	180
6	1030	792	570	222	205	205	319	333	1270	720	372	175
7	1060	996	560	210	205	205	312	348	1360	698	364	156
8	1090	1190	510	210	216	205	291	356	1370	698	356	156
9	1140	1320	501	205	222	205	284	404	1360	665	364	165
10	1110	1480	520	190	252	195	277	438	1360	698	356	156
11	1110	1700	492	190	305	190	270	474	1340	768	356	152
12	1140	1720	456	185	326	185	277	501	1320	804	340	175
13	1120	1660	429	180	333	180	277	520	1280	804	333	228
14	1060	1560	412	175	340	180	264	550	1250	780	326	319
15	1140	1600	380	165	340	180	252	550	1210	756	333	412
16	1190	1520	348	165	340	175	246	540	1160	720	312	501
17	1210	1450	333	205	326	175	246	560	1080	698	333	510
18	1210	1320	333	234	319	175	240	570	1010	654	298	520
19	1190	1210	319	252	305	175	240	570	966	632	277	510
20	1090	1140	298	326	305	170	234	570	924	610	270	510
21	1040	1030	270	319	298	170	234	570	882	590	252	520
22	952	938	264	319	277	170	240	570	868	570	246	530
23	896	840	258	305	291	170	240	570	840	560	234	530
24	840	780	258	298	284	165	234	570	840	530	216	530
25	768	768	264	284	270	165	234	600	868	510	222	530
26	698	698	258	270	264	165	234	643	910	492	216	600
27	665	676	252	264	258	165	234	698	896	483	210	632
28	621	792	246	258	258	165	234	709	882	447	210	632
29	632	732	228	234	246	175	234	720	840	447	205	665
30	654	698	222	228	---	190	252	744	816	420	205	654
31	665	---	205	228	---	234	---	744	---	404	205	---
TOTAL	27902	32248	12380	7112	7854	5833	7917	15865	31290	19986	9391	11413
MEAN	900	1075	399	229	271	188	264	512	1043	645	303	380
MAX	1210	1720	687	326	340	234	319	744	1370	804	404	665
MIN	270	676	205	165	205	165	234	258	768	404	205	152
CFSM	9.00	10.8	3.99	2.29	2.71	1.88	2.64	5.12	10.4	6.45	3.03	3.80
IN.	10.38	12.00	4.61	2.65	2.92	2.17	2.95	5.90	11.64	7.[illegible]	3.49	4.25
AC-FT	55340	63960	24560	14110	15580	11570	15700	31470	62060	39[illegible]	18630	22640

CAL YR 1979 TOTAL 166487 MEAN 456 MAX 1720 MIN 90 CFSM 4.56 IN 61.93 AC-FT 330200
WTR YR 1980 TOTAL 189191 MEAN 517 MAX 1720 MIN 152 CFSM 5.17 IN 70.38 AC-FT 375300

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-76 and 1979 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 1975 to September 1976 and November 1978 to current year.

INSTRUMENTATION.--Temperature recorder Aug. 21, 1975 to Sept. 30, 1976, and Nov. 17, 1978 to current year.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the mean for the river by temperature cross-sections on Mar. 27, May 14, and June 18. A maximum variation of 2.0°C was found within the cross sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.5°C, Aug. 4, 1980; minimum, 1.0°C, Feb. 15-27, Dec. 24-26, 31, 1979 and Jan. 1 to Feb. 1, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.5°C, Aug. 4; minimum, 1.0°C, Dec. 24-26 and Dec. 31 to Feb. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE, WATER (DEG C)
MAR					
27...	1050	139	--	180	--
27...	1051	--	5.0	--	3.7
27...	1052	--	25	--	3.5
27...	1053	--	45	--	3.3
27...	1054	--	65	--	3.3
27...	1055	--	85	--	3.3
27...	1056	--	105	--	3.3
27...	1057	--	125	--	3.4
27...	1058	--	133	--	3.5
MAY					
14...	1035	232	227	559	5.5
14...	1036	--	202	--	5.0
14...	1037	--	182	--	5.0
14...	1038	--	152	--	5.0
14...	1039	--	112	--	5.2
14...	1040	--	62	--	6.0
14...	1041	--	22	--	7.0
14...	1042	--	2.0	--	7.0
JUN					
18...	1455	147	10	982	9.5
18...	1456	--	20	--	9.4
18...	1457	--	40	--	8.9
18...	1458	--	60	--	8.8
18...	1459	--	80	--	8.5
18...	1500	--	100	--	8.4
18...	1501	--	120	--	8.4
18...	1502	--	140	--	8.4
18...	1503	--	160	--	8.5
18...	1504	--	180	--	8.5
18...	1505	--	200	--	8.7
18...	1506	--	220	--	9.1
18...	1507	--	230	--	9.1

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.0	10.0	6.5	6.0	4.5	4.0	1.0	1.0	1.5	1.0	2.5	2.5
2	10.5	10.0	6.5	6.0	4.5	4.0	1.0	1.0	1.5	1.5	2.5	2.5
3	10.0	10.0	6.5	5.5	4.5	4.0	1.0	1.0	1.5	1.5	2.5	2.5
4	10.0	9.5	6.5	6.0	4.0	4.0	1.0	1.0	1.5	1.5	2.5	2.5
5	10.0	10.0	6.5	6.0	4.0	4.0	1.0	1.0	1.5	1.5	3.0	2.5
6	10.0	9.5	6.5	6.0	4.0	4.0	1.0	1.0	1.5	1.5	3.0	2.5
7	9.5	9.5	6.5	6.5	4.0	4.0	1.0	1.0	1.5	1.5	3.0	2.5
8	10.0	9.5	7.0	6.5	4.0	4.0	1.0	1.0	1.5	1.5	3.0	2.5
9	10.0	9.5	7.0	6.5	4.0	3.5	1.0	1.0	1.5	1.5	3.0	2.5
10	10.0	9.0	7.0	7.0	3.5	3.5	1.0	1.0	1.5	1.5	3.0	2.5
11	9.0	9.0	7.0	7.0	3.5	3.5	1.0	1.0	1.5	1.5	3.0	2.5
12	9.0	9.0	7.0	7.0	3.5	2.5	1.0	1.0	1.5	1.5	3.0	2.5
13	9.0	9.0	7.0	7.0	3.0	2.5	1.0	1.0	1.5	1.5	3.5	2.5
14	9.0	8.5	7.0	6.5	3.0	3.0	1.0	1.0	1.5	1.5	3.5	2.5
15	8.5	8.5	7.0	6.5	3.0	2.5	1.0	1.0	2.0	1.5	---	---
16	9.0	8.5	7.0	6.5	3.0	2.5	1.0	1.0	2.0	2.0	---	---
17	9.0	9.0	6.5	6.5	3.0	3.0	1.0	1.0	2.0	2.0	---	---
18	9.0	9.0	6.5	6.5	3.0	2.0	1.0	1.0	2.0	2.0	---	---
19	9.0	8.0	6.5	6.0	3.0	2.0	1.0	1.0	2.0	2.0	---	---
20	8.0	8.0	6.5	6.0	3.0	3.0	1.0	1.0	2.0	2.0	---	---
21	8.0	8.0	6.0	6.0	3.0	3.0	1.0	1.0	2.0	2.0	---	---
22	8.0	7.5	6.0	6.0	3.0	2.5	1.0	1.0	2.0	2.0	---	---
23	7.5	7.0	6.0	5.5	2.5	1.5	1.0	1.0	2.0	2.0	---	---
24	7.0	7.0	5.5	4.5	1.5	1.0	1.0	1.0	2.0	2.0	---	---
25	7.0	7.0	5.0	4.0	1.5	1.0	1.0	1.0	2.0	2.0	---	---
26	7.0	7.0	5.0	4.0	1.5	1.0	1.0	1.0	2.5	2.0	---	---
27	7.0	7.0	5.0	4.0	2.0	1.5	1.0	1.0	2.5	2.5	3.0	---
28	7.0	6.5	5.0	3.5	2.0	2.0	1.0	1.0	2.5	2.5	3.5	2.5
29	6.5	6.5	4.5	4.0	2.0	1.5	1.0	1.0	2.5	2.5	3.0	2.5
30	6.5	6.0	4.5	4.5	1.5	1.5	1.0	1.0	---	---	3.0	2.5
31	6.5	6.5	---	---	1.5	1.0	1.0	1.0	---	---	2.5	1.5
MONTH	11.0	6.0	7.0	3.5	4.5	1.0	1.0	1.0	2.5	1.0	3.5	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.5	1.5	5.5	4.0	8.0	6.5	10.5	8.0	14.0	10.5	11.0	10.0
2	2.5	1.5	5.5	4.5	9.0	6.0	10.0	9.5	14.0	12.5	11.5	10.5
3	2.5	2.0	6.0	4.0	9.5	6.5	10.0	8.5	14.5	13.0	11.5	10.0
4	3.0	2.5	6.5	4.5	8.5	7.0	11.0	8.5	17.5	13.0	11.5	10.5
5	3.0	2.5	5.0	4.5	9.0	7.0	11.5	10.5	16.5	14.5	11.5	10.0
6	3.5	2.5	6.0	4.5	8.5	7.0	11.0	10.0	15.5	14.0	12.0	10.5
7	3.5	3.0	6.5	4.5	7.5	6.5	11.5	10.0	14.5	14.0	11.0	10.5
8	3.5	3.0	6.0	4.5	8.5	6.5	11.5	11.0	14.5	14.0	9.5	8.5
9	4.0	3.0	5.0	4.5	8.0	7.0	11.0	10.5	14.5	14.0	10.5	8.5
10	4.0	3.0	5.0	4.5	7.5	7.0	11.0	10.5	14.5	13.5	11.5	10.5
11	4.0	3.5	6.0	4.5	7.0	7.0	11.0	10.0	14.0	13.5	12.0	10.5
12	3.5	3.0	6.0	5.0	7.0	7.0	10.0	10.0	14.0	13.5	11.0	10.5
13	4.0	3.0	5.5	5.0	7.0	6.0	11.0	10.0	13.5	13.0	11.5	11.0
14	4.0	3.0	6.5	5.0	7.0	6.0	11.0	9.0	14.0	13.5	11.5	11.5
15	4.0	3.5	5.5	5.0	8.5	7.0	10.0	9.0	14.0	13.5	11.5	11.5
16	5.0	3.0	7.0	5.0	8.0	7.5	12.0	9.5	13.5	13.0	11.5	11.5
17	5.0	3.5	5.5	5.0	8.0	7.5	14.0	11.0	13.5	13.0	11.5	11.5
18	4.5	3.5	6.0	5.0	9.0	7.5	14.0	12.5	13.0	12.0	11.5	9.0
19	4.5	3.5	6.0	5.0	9.0	8.5	13.0	8.5	13.0	12.0	10.0	8.5
20	4.5	3.5	6.0	5.0	8.5	7.5	12.0	8.5	12.5	11.5	10.5	10.0
21	4.5	3.5	8.0	5.0	8.5	7.0	12.5	10.5	14.0	12.5	10.5	10.5
22	4.0	3.5	7.0	6.0	7.0	6.5	12.0	10.0	13.5	12.0	10.5	10.5
23	5.0	3.5	6.5	6.0	10.0	6.5	15.0	10.0	12.5	12.0	10.5	10.5
24	5.0	4.0	7.0	5.5	9.0	8.0	14.5	11.5	13.0	10.0	10.5	10.5
25	5.0	3.5	7.5	6.0	8.5	7.5	14.5	11.5	12.5	10.0	10.5	10.5
26	5.0	4.0	6.5	5.5	7.5	6.5	16.5	14.5	14.0	11.0	10.5	10.5
27	5.5	4.0	6.0	5.5	8.0	6.5	15.5	15.0	13.5	12.0	10.5	10.5
28	5.0	4.0	7.5	5.5	7.5	6.5	15.5	14.5	13.5	12.0	10.5	10.0
29	5.5	4.0	7.5	6.0	8.5	6.5	16.0	14.5	12.0	12.0	10.0	9.0
30	4.5	4.0	7.0	6.0	10.0	7.0	14.5	13.5	12.0	12.0	9.5	9.5
31	---	---	7.0	5.5	---	---	13.5	13.0	12.0	10.0	---	---
MONTH	5.5	1.5	8.0	4.0	10.0	6.0	16.5	8.0	17.5	10.0	12.0	8.5
YEAR	17.5	1.0										

15297200 MYRTLE CREEK NEAR KODIAK

LOCATION.--Lat 57°36'12", long 152°24'12", in NE¼SW¼ sec.6, T.30 S., R.19 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on left bank 0.1 mi (0.2 km) upstream from bridge, 0.3 mi (0.5 km) upstream from mouth, and 13 mi (21 km) south of Kodiak.

DRAINAGE AREA.--4.74 mi^2 (12.28 km^2).

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map. Prior to Apr. 4, 1977 at site 200 ft (60 m) downstream on right bank at same datum.

REMARKS.--Records good except those for Dec. 14 to Feb. 5, which are poor. Periodic high tides cause backwater at the gage and are shown on the stage record. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years, 46.0 ft^3/s (1.303 m^3/s), 131.79 in/yr (3,347 mm/yr), 33,330 acre-ft/yr (41.1 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft^3/s (38.2 m^3/s) Jan. 3, 1977, gage height, 5.61 ft (1.710 m) site then in use, 6.93 ft (2.112 m) from floodmarks at present site, from rating curve extended above 400 ft^3/s (11.3 m^3/s) on the basis of slope-area measurement of peak flow; maximum gage height, 8.40 ft (2.560 m) Mar. 28, 1964, at site then in use, tidal wave caused by earthquake; minimum daily discharge, about 1.0 ft^3/s (0.028 m^3/s) Mar. 3-18, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft^3/s (16 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 8	0500	654	18.5	5.34	1.628	Feb. 9	0400	*818	23.2	*5.77	1.759
Jan. 18	1700	794	22.5	5.71	1.740	Feb. 10	2250	798	22.6	5.72	1.743
Jan. 20	0930	577	16.3	5.12	1.561						

Minimum discharge recorded, 3.3 ft^3/s (0.093 m^3/s) Aug. 22, but may have been less during period of no gage-height record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	102	35	8.0	9.0	20	107	90	55	14	4.6	4.0
2	243	88	27	7.0	8.0	31	49	70	64	15	4.6	3.8
3	117	48	24	7.0	7.0	19	107	133	114	14	4.3	3.6
4	210	31	21	7.0	10	31	64	125	98	13	4.0	3.6
5	83	25	18	10	20	26	48	79	84	15	4.0	3.6
6	54	104	17	9.0	48	23	34	90	80	14	3.8	3.6
7	72	110	15	8.0	100	30	26	141	47	12	3.8	21
8	355	106	14	7.0	232	21	28	193	31	10	4.3	49
9	174	66	13	7.0	428	18	40	108	33	10	4.8	53
10	155	63	12	6.0	356	15	43	88	43	10	5.3	35
11	112	92	11	6.0	255	15	58	75	33	10	4.8	25
12	89	62	10	6.0	251	13	35	151	36	10	4.0	173
13	57	43	10	5.0	112	13	28	145	30	10	4.0	95
14	53	30	9.0	5.0	46	12	26	77	29	8.8	4.3	48
15	119	36	20	5.0	31	11	23	68	26	8.4	4.3	30
16	86	28	15	50	25	11	28	152	22	8.1	4.6	23
17	59	24	13	200	20	10	35	151	20	7.8	4.0	19
18	46	21	12	400	18	10	39	171	19	7.4	3.8	17
19	32	21	11	195	15	10	30	89	19	8.1	3.8	14
20	26	18	10	302	12	20	26	62	31	7.4	3.6	13
21	27	16	9.0	200	11	15	39	54	24	7.0	3.6	12
22	24	14	9.0	80	10	13	35	57	25	6.4	3.6	11
23	22	13	8.0	50	30	47	28	104	23	6.4	3.6	10
24	19	12	15	30	24	22	59	139	24	6.0	4.8	9.7
25	17	25	13	200	20	21	67	86	26	5.6	3.8	31
26	16	19	11	100	18	17	92	216	23	5.3	3.6	170
27	15	66	10	60	16	15	96	106	20	5.3	3.6	63
28	15	129	9.0	30	15	12	66	75	18	4.8	3.6	101
29	24	89	9.0	20	15	16	72	101	16	5.3	3.6	102
30	39	54	8.0	15	---	43	119	89	15	5.0	4.6	59
31	29	---	8.0	10	---	199	---	67	---	4.8	4.8	---
TOTAL	2469	1555	426.0	2045.0	2162.0	779	1547	3352	1128	274.9	127.9	1205.9
MEAN	79.6	51.8	13.7	66.0	74.6	25.1	51.6	108	37.6	8.87	4.13	40.2
MAX	355	129	35	400	428	199	119	216	114	15	5.3	173
MIN	15	12	8.0	5.0	7.0	10	23	54	15	4.8	3.6	3.6
CFSM	16.8	10.9	2.89	13.9	15.7	5.30	10.9	22.8	7.93	1.87	.87	8.48
IN.	19.37	12.20	3.34	16.05	16.96	6.11	12.14	26.30	8.85	2.16	1.00	9.46
AC-FT	4900	3080	845	4060	4290	1550	3070	6650	2240	545	254	2390

CAL YR 1979 TOTAL 19291.8 MEAN 52.9 MAX 500 MIN 6.6 CFSM 11.2 IN 151.37 AC-FT 38270
WTR YR 1980 TOTAL 17071.7 MEAN 46.6 MAX 428 MIN 3.6 CFSM 9.83 IN 133.95 AC-FT 33860

NOTE.--No gage-height record Dec. 14 to Jan. 16.

15297485 KIZHUYAK RIVER NEAR PORT LIONS

LOCATION.--Lat 57°42'38", long 152°52'06", in NE¼NE¼ sec.32, T.28 S., R.22 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank 1.3 mi (2.1 km) upstream from mouth at Kizhuyak Bay and 10.8 mi (17.4 km) south of Port Lions.

DRAINAGE AREA.--27.5 mi^2 (71.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 15 ft (4.6 m), from topographic map.

REMARKS.--Water-discharge records fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 5,430 ft^3/s (154 m^3/s) Sept. 26, gage height, 10.65 ft (3.246 m), from rating curve extended above 480 ft^3/s (13.6 m^3/s) on basis of slope-area measurement at gage height 10.60 ft (3.231 m), for flood of Oct. 21, 1980; minimum daily, about 15 ft^3/s (0.4 m^3/s) Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, APRIL TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							16	63	280	357	226	101
2							15	71	300	357	218	79
3							20	95	450	391	236	54
4							26	172	540	397	213	40
5							35	146	660	432	244	33
6							33	160	460	432	269	28
7							36	176	430	438	226	158
8							33	274	400	463	192	362
9							37	231	520	476	259	188
10							31	184	590	476	226	138
11							35	157	450	514	184	131
12							30	184	360	528	131	385
13							25	208	310	568	98	362
14							23	168	290	420	98	330
15							20	149	300	319	168	309
16							20	264	320	278	172	218
17							26	283	330	274	153	149
18							30	240	335	319	160	111
19							28	184	340	357	111	87
20							23	146	340	340	84	68
21							23	138	351	324	61	66
22							23	172	335	283	54	63
23							22	192	324	283	44	49
24							20	254	264	283	40	42
25							22	254	278	274	44	629
26							23	340	303	288	40	2000
27							31	309	324	278	49	408
28							31	254	319	274	61	568
29							35	300	335	274	54	638
30							54	360	374	274	54	346
31							---	290	---	249	105	---
TOTAL	---	---	---	---	---	---	826	6418	11212	11220	4274	8140
MEAN	---	---	---	---	---	---	27.5	207	374	362	138	271
MAX	---	---	---	---	---	---	54	360	660	568	269	2000
MIN	---	---	---	---	---	---	15	63	264	249	40	28
CFSM	---	---	---	---	---	---	1.00	7.53	13.6	13.2	5.02	9.86
IN.	---	---	---	---	---	---	1.12	8.68	15.17	15.18	5.78	11.01
AC-FT	---	---	---	---	---	---	1640	12730	22240	22250	8480	16150

15297485 KIZHUYAK RIVER NEAR PORT LIONS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1980.

PERIOD OF DAILY RECORD.--April to September 1980.
WATER TEMPERATURES: April to September 1980.

INSTRUMENTATION.--Temperature recorder since April 9, 1980.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross section on May 15. No variation was found within the section.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum observed, 10.5°C Aug. 5; minimum observed, 1.5°C Apr. 12, 24, and May 5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	TEMPER- ATURE, WATER (DEG C)
MAY				
15...	1005	80	105	3.0
15...	1006	--	99	3.0
15...	1007	--	91	3.0
15...	1008	--	83	3.0
15...	1009	--	70	3.0
15...	1010	--	59	3.0
15...	1011	--	45	3.0

TEMPERATURE, WATER (DEG. C), APRIL TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	5.5	3.5	8.0	5.5		
2	---	---	---	2.5	---	---	5.0	4.0	8.5	6.0		
3	---	---	3.0	2.0	---	---	6.0	3.5	9.0	6.0		
4	---	---	3.5	2.0	---	---	7.5	3.5	9.5	6.0		
5	---	---	3.5	1.5	---	---	6.0	4.0	10.5	7.0		
6	---	---	4.0	2.0	---	---	6.0	3.5	10.0	7.0		
7	---	---	2.5	2.0	---	---	7.0	3.5	7.5	6.5		
8	---	---	3.5	2.5	---	---	6.0	4.0	7.5	6.5		
9	3.5	2.0	3.5	2.0	---	---	6.5	4.0	9.0	6.0		
10	3.0	2.0	3.5	2.0	---	---	7.5	4.0	8.5	6.0		
11	4.0	2.0	4.5	2.0	---	---	5.5	4.5	7.5	5.5		
12	3.5	1.5	---	---	---	---	6.0	4.0	7.0	5.5		
13	3.5	2.0	---	---	---	---	7.5	4.0	7.0	5.5		
14	3.5	2.0	---	2.5	---	---	8.0	4.0	7.0	6.0		
15	3.5	2.5	---	---	---	---	7.0	5.0	7.5	6.0		
16	4.0	2.0	---	---	---	---	6.5	4.5	8.0	---		
17	3.0	2.0	---	---	---	---	6.0	4.5	9.0	6.0		
18	2.5	2.0	---	---	6.0	2.5	6.0	5.0	8.0	6.0		
19	3.0	2.5	---	---	6.0	3.0	7.5	5.0	8.0	6.0		
20	3.0	2.0	---	---	5.5	3.5	9.5	6.0	7.0	6.0		
21	3.5	2.0	---	---	5.0	3.0	8.0	5.0	7.0	6.0		
22	3.5	2.0	---	---	4.0	2.5	9.0	5.0	7.5	5.0		
23	4.0	2.0	---	---	6.5	2.0	9.5	5.0	6.5	5.0		
24	2.5	1.5	---	---	4.5	3.5	7.5	5.5	7.0	5.5		
25	3.5	2.0	---	---	4.0	3.0	9.0	5.5	7.5	5.5		
26	3.0	2.0	---	---	6.0	3.5	8.0	6.0	---	---		
27	3.5	2.0	---	---	6.0	3.0	8.0	6.0	---	---		
28	3.5	2.0	---	---	6.0	3.5	8.5	5.5	---	---		
29	3.0	2.5	---	---	6.5	3.5	8.0	6.0	---	---		
30	3.5	2.5	---	---	6.5	3.5	8.0	6.0	---	---		
31	---	---	---	---	---	---	8.0	6.0	---	---		
MONTH	4.0						9.5	3.5	10.5			

15297900 ESKIMO CREEK AT KING SALMON

LOCATION.--Lat 58°41'08", long 156°40'08", in SW¼ sec.23, T.17 S., R.44 W., Hydrologic Unit 19040002, on right bank 30 ft (9.1 m) upstream from culvert on King Salmon-Naknek road 0.3 mi (0.5 km) upstream from mouth and 0.3 mi (0.5 km) northwest of King Salmon post office.

DRAINAGE AREA.--16.1 mi^2 (41.7 km^2).

PERIOD OF RECORD.--Annual maximums, water years 1965-67, 1969-73. October 1973 to September 1976 and October 1977 to current year.

GAGE.--Water-stage recorder and culvert control. Altitude of gage is 20 ft (6 m), from topographic map. Prior to Oct. 18, 1973, crest-stage gage on right bank at datum 2.69 ft (0.820 m) lower.

REMARKS.--Records fair except those for Dec. 14 to Feb. 25, which are poor.

AVERAGE DISCHARGE.--6 years (water years 1974-76, 1978-80), 13.0 ft^3/s (0.368 m^3/s), 10.96 in/yr (278 mm/yr), 9,420 acre-ft/yr (11.6 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 227 ft^3/s (6.43 m^3/s) June 1967, gage height, 8.51 ft (2.594 m), present datum, from rating curve extended above 40 ft^3/s (1.1 m^3/s) on basis of computation of peak flow through culvert; maximum gage height, 8.72 ft (2.658 m) Aug. 19, 1976, backwater from beaver dam; minimum daily discharge, about 1.5 ft^3/s (0.04 m^3/s) Jan. 13-17, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 53 ft^3/s (1.50 m^3/s), Nov. 8, gage height, 6.88 ft (2.097 m); maximum gage height, 8.33 ft (2.539 m), Feb. 11, backwater due to ice, minimum daily discharge, about 1.5 ft^3/s (0.04 m^3/s) Jan. 13-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	18	19	2.0	4.0	5.5	33	7.7	14	15	25	30
2	12	18	18	2.0	4.0	6.0	37	8.3	14	15	25	26
3	14	17	17	2.0	3.5	5.8	41	9.6	13	14	27	24
4	15	15	16	2.0	3.5	5.4	34	9.8	14	15	29	22
5	17	15	16	3.0	3.5	6.3	30	9.4	12	17	29	20
6	19	22	15	5.0	3.5	6.0	24	9.0	14	20	27	19
7	20	33	14	2.5	3.5	10	21	8.3	16	21	25	17
8	22	48	14	2.0	3.5	9.8	18	8.7	16	21	27	16
9	25	50	13	2.0	13	10	16	8.3	14	19	29	19
10	28	46	13	2.0	14	9.0	16	7.9	14	19	30	22
11	30	43	23	2.0	13	8.0	14	7.9	14	25	30	25
12	28	41	9.2	2.0	12	7.5	12	8.3	16	31	28	23
13	27	36	7.5	1.5	11	7.0	11	8.1	19	35	26	28
14	26	31	7.0	1.5	10	7.0	11	7.3	20	36	25	35
15	25	32	6.5	1.5	9.0	6.5	11	7.3	19	31	30	40
16	27	39	6.0	1.5	8.7	6.5	11	7.5	16	28	32	42
17	34	41	5.5	1.5	7.5	8.0	9.8	7.3	14	26	36	42
18	35	41	5.0	7.0	6.9	7.7	10	7.5	13	22	36	42
19	31	38	4.5	3.5	6.5	6.3	9.8	10	12	18	34	40
20	26	37	4.0	5.0	6.0	8.0	9.2	10	13	16	32	36
21	23	35	4.0	6.5	6.0	10	8.7	9.6	14	15	32	34
22	22	32	3.5	4.4	5.5	13	8.5	9.2	15	14	28	32
23	19	30	3.4	4.4	5.5	19	8.3	9.6	15	15	26	30
24	16	29	3.0	4.4	5.5	24	8.1	12	14	17	24	28
25	14	28	3.0	4.6	5.5	28	7.9	12	14	19	22	26
26	14	29	3.0	6.3	5.4	30	8.1	12	16	19	20	25
27	13	26	3.0	5.6	5.3	31	7.9	11	17	17	19	23
28	13	21	2.5	5.0	5.1	33	7.9	11	17	20	22	21
29	13	19	2.5	4.5	4.9	28	7.9	11	18	25	22	19
30	15	19	2.5	4.5	---	25	7.7	13	16	27	19	19
31	16	---	2.5	4.0	---	28	---	14	---	27	25	---
TOTAL	651	929	266.1	105.7	195.3	415.3	459.8	292.6	453	659	841	825
MEAN	21.0	31.0	8.58	3.41	6.73	13.4	15.3	9.44	15.1	21.3	27.1	27.5
MAX	35	50	23	7.0	14	33	41	14	20	36	36	42
MIN	12	15	2.5	1.5	3.5	5.4	7.7	7.3	12	14	19	16
CFSM	1.30	1.93	.53	.21	.42	.83	.95	.59	.94	1.32	1.68	1.71
IN.	1.50	2.15	.61	.24	.45	.96	1.06	.68	1.05	1.52	1.94	1.91
AC-FT	1290	1840	528	210	387	824	912	580	899	1310	1670	1640

CAL YR 1979 TOTAL 4596.3 MEAN 12.6 MAX 50 MIN 2.5 CFSM .78 IN 10.62 AC-FT 9120
WTR YR 1980 TOTAL 6092.8 MEAN 16.6 MAX 50 MIN 1.5 CFSM 1.03 IN 14.08 AC-FT 12090

NOTE.--No gage-height record Dec. 22 to Jan. 22.

15300500 KVICHAK RIVER AT IGIUGIG

LOCATION.--Lat 59°19'44", long 155°53'57", in NE¼ sec.7, T.10 S., R.39 W., Hydrologic Unit 19040002, on left bank 0.7 mi (1.1 km) downstream from outlet of Iliamna Lake at Igiugig.

DRAINAGE AREA.--6,500 mi^2 (16,800 km^2), approximately.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 45 ft (14 m), from topographic map. Prior to Oct. 1, 1969, nonrecording gage at site 1,500 ft (460 m) upstream at different datum.

REMARKS.--Records good except those for periods of no gage-height record, Dec. 9 to Jan. 30 and Feb. 22 to Apr. 9, which are fair. Discharge affected by storage in Lake Iliamna, Lake Clark, and other smaller lakes covering over 1,100 mi^2 (2,800 km^2).

AVERAGE DISCHARGE.--13 years, 17,590 ft^3/s (498.1 m^3/s), 36.75 in/yr (933 mm/yr), 12,740,000 acre-ft/yr (15.7 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,700 ft^3/s (1,380 m^3/s) Sept. 12, 1980, gage height, 23.64 ft (7.205 m); minimum daily, 6,400 ft^3/s (181 m^3/s) Apr. 21,22, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,700 ft^3/s (1,380 m^3/s) Sept. 12, gage height, 23.64 ft (7.205 m); minimum, 12,900 ft^3/s (365 m^3/s) Apr. 27, gage height, 18.83 ft (5.739 m). Minimum may have been less during period of questionable gage-height record, May 4-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25200	24200	22900	19500	17400	15000	13500	13200	16500	23100	33400	44700
2	27100	23500	22500	19500	17600	15000	13500	13200	16600	23300	34000	44300
3	25400	24000	22500	19500	17400	15000	13500	13300	16600	23300	34600	43700
4	26700	23400	22300	19500	17500	15000	13500	13300	16700	23700	35000	43800
5	24800	24500	22200	19000	17500	15000	13500	13200	16800	24100	35400	43500
6	25100	23700	22500	19000	17300	15000	13500	13300	17000	24300	35700	43400
7	25900	24000	22100	19000	17600	15000	13500	13500	17100	24600	35900	43300
8	26400	24000	21700	19000	17600	14500	13500	13200	17400	24800	36200	43200
9	25600	23500	21500	19000	16700	14500	13500	13500	17600	25000	37100	43200
10	26600	23500	21500	18500	17000	14500	13500	13500	17800	26000	38000	43500
11	25800	23600	21500	18500	17000	14500	13400	13600	18100	26400	38200	43200
12	25800	23500	21000	18500	16500	14500	13600	14400	18400	26800	38700	45100
13	25800	23300	21000	18500	16600	14500	13500	14200	18600	27000	39100	43000
14	27200	23500	21000	18500	16400	14500	13500	13900	18900	27200	40100	43300
15	27400	23500	21000	18500	16600	14500	13400	14100	19300	27800	40300	42900
16	26100	22900	21000	18000	16300	14000	13400	13900	19300	28300	40600	42900
17	25800	23400	21000	18000	16200	14000	13300	14600	19300	28800	40800	42800
18	25400	23400	21000	18000	16200	14000	13200	14600	19500	29100	40000	42500
19	25300	23000	20500	18000	16100	14000	13100	14600	20000	29400	42600	42500
20	25500	23200	20500	18000	16000	14000	13300	14700	20200	29700	43300	43200
21	25400	22800	20500	18000	15900	14000	13300	14600	20500	30000	43700	43100
22	25300	22800	20500	18000	15500	14000	13200	15000	20700	30300	44100	42700
23	24800	22700	20500	18000	15500	14000	13300	15900	21100	30800	44500	42500
24	24600	22900	20500	18000	15500	14000	13200	15800	22000	31100	44600	42300
25	24600	22400	20500	18000	15500	14000	13200	16000	21600	31100	44600	43500
26	24300	22600	20000	18000	15500	14000	13200	16200	21600	31200	44800	43800
27	24000	23300	20000	17500	15500	14000	13100	16300	21800	31200	45000	42700
28	24400	23900	20000	17500	15500	14000	13200	16300	22000	31600	44900	41600
29	24300	22900	20000	17500	15500	14000	13100	16400	22300	32600	44800	41300
30	23800	22700	20000	17500	---	14000	13200	16500	22800	32900	45100	41300
31	23700	---	20000	17600	---	14000	---	16500	---	33000	45000	---
TOTAL	788100	700600	653700	569600	477400	445000	400700	451300	578100	868500	1250100	1292800
MEAN	25420	23350	21090	18370	16460	14350	13360	14560	19270	28020	40330	43090
MAX	27400	24500	22900	19500	17600	15000	13600	16500	22800	33000	45100	45100
MIN	23700	22400	20000	17500	15500	14000	13100	13200	16500	23100	33400	41300
CFSM	3.91	3.59	3.25	2.83	2.53	2.21	2.06	2.24	2.97	4.31	6.21	6.63
IN.	4.51	4.01	3.74	3.26	2.73	2.55	2.29	2.58	3.31	4.97	7.15	7.40
AC-FT	1563000	1390000	1297000	1130000	946900	882700	794800	895200	1147000	1723000	2480000	2564000

CAL YR 1979 TOTAL 6898500 MEAN 18900 MAX 29400 MIN 11100 CFSM 2.91 IN 39.48 AC-FT 13680000
WTR YR 1980 TOTAL 8475900 MEAN 23160 MAX 45100 MIN 13100 CFSM 3.56 IN 48.51 AC-FT 16810000

15302000 NUYAKUK RIVER NEAR DILLINGHAM

LOCATION.--Lat 59°56'04", long 158°11'05", in NE¼ sec.10, T.3 S., R.52 W., Hydrologic Unit 19040002, on left bank 1,000 ft (300 m) downstream from Tikchik Lake, 0.5 mi (0.8 km) upstream from unnamed tributary, and 62 mi (100 km) north of Dillingham.

DRAINAGE AREA.--1,490 mi^2 (3,860 km^2), approximately.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WRD Alaska 1972: 1971.

GAGE.--Water-stage recorder. Altitude of gage is 325 ft (99 m), from topographic map. Prior to Oct. 1, 1957, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good except those for the periods of no gage-height record, Nov. 28 to Dec. 30 and Mar. 4 to Apr. 8, and the period May 5 to June 5, which are poor. Discharge affected by storage in Tikchik Lake, Nuyakuk Lake, Lake Chauekuktuli, and other smaller lakes in the basin covering over 170 mi^2 (440 km^2).

AVERAGE DISCHARGE.--27 years, 6,092 ft^3/s (172.5 m^3/s), 55.52 in/yr (1,410 mm/yr), 4,414,000 acre-ft/year (5.44 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft^3/s (912 m^3/s) July 2, 1977, gage height, 10.49 ft (3.197 m); minimum daily, about 770 ft^3/s (21.8 m^3/s) Apr. 16-30, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,500 ft^3/s (609 m^3/s) June 13, gage height, 8.12 ft (2.475 m); minimum recorded, 2,340 ft^3/s (66.3 m^3/s) Feb. 8, but may have been less during period of no gage-height record Mar. 4 to Apr. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7600	9590	6800	3210	2700	2520	2700	2600	17000	19100	14900	6880
2	8000	9710	6700	3130	2650	2470	2700	2620	18000	19200	14400	6650
3	8500	9490	6600	3060	2650	2430	2650	2590	19000	19400	14100	6490
4	9000	9190	6400	3010	2610	2420	2620	2640	20000	19200	13700	6300
5	9500	8790	6300	3030	2530	2450	2600	2770	20000	19300	13200	6110
6	10000	9480	6200	2980	2520	2500	2580	2880	20700	19600	12900	5920
7	10500	9700	6000	2950	2490	2520	2540	3000	21000	19700	12600	5760
8	11000	9640	5800	2900	2430	2540	2520	3100	21000	19700	12500	5600
9	12000	10100	5600	2840	2540	2600	2500	3300	20900	19600	12200	5390
10	13000	10700	5400	2820	2630	2600	2470	3400	20900	19400	11900	5240
11	14300	11000	5200	2800	2640	2600	2440	3600	21100	19500	11600	5100
12	14500	11000	5000	2750	2800	2600	2420	3800	21200	19900	11400	4900
13	14500	10700	4800	2730	2840	2550	2420	4100	21300	20100	11100	5280
14	14500	10500	4700	2700	2880	2500	2450	4400	21200	20100	10700	5510
15	14700	10400	4500	2690	2860	2500	2460	4800	20900	20100	10500	5740
16	14900	10300	4400	2610	2850	2450	2470	5100	20800	19900	10300	5810
17	14900	10000	4200	2570	2790	2400	2460	5500	20700	19600	9900	5830
18	14800	9820	4100	2600	2770	2400	2460	6000	20400	19300	9930	5830
19	14400	9630	4000	2740	2750	2400	2430	6600	20000	19000	9690	5740
20	14100	9210	3900	2780	2730	2400	2420	7400	20100	18800	9430	5700
21	13800	9040	3900	2820	2700	2400	2420	8000	20100	18500	9190	5640
22	13600	8620	3800	2850	2670	2400	2430	8500	20100	18300	8920	5630
23	13000	8180	3700	2810	2690	2450	2420	9200	19800	18000	8630	5650
24	12500	7670	3600	2770	2700	2470	2430	9800	19700	17700	8390	5600
25	12000	7540	3600	2720	2690	2500	2420	10500	19900	17500	8110	5600
26	11600	7360	3500	2760	2740	2500	2430	11500	20100	17100	7850	5800
27	11100	7210	3500	2790	2680	2520	2480	12500	20000	16800	7620	6200
28	10700	7200	3400	2790	2590	2530	2470	13500	19900	16400	7420	6600
29	10300	7000	3300	2740	2550	2550	2520	14500	19700	16100	7240	6800
30	10100	7000	3300	2760	---	2580	2560	15000	19400	15800	7070	7000
31	9750	---	3270	2700	---	2600	---	16000	---	15400	7030	---
TOTAL	373150	275770	145470	87410	77670	77350	74890	209200	604900	578100	324420	176300
MEAN	12040	9192	4693	2820	2678	2495	2496	6748	20160	18650	10470	5877
MAX	14900	11000	6800	3210	2880	2600	2700	16000	21300	20100	14900	7000
MIN	7600	7000	3270	2570	2430	2400	2420	2590	17000	15400	7030	4900
CFSM	8.08	6.17	3.15	1.89	1.80	1.67	1.68	4.53	13.5	12.5	7.03	3.94
IN.	9.32	6.88	3.63	2.18	1.94	1.93	1.87	5.22	15.10	14.43	8.10	4.40
AC-FT	740100	547000	288500	173400	154100	153400	148500	414900	1200000	1147000	643500	349700

CAL YR 1979 TOTAL 3031830 MEAN 8306 MAX 21000 MIN 1800 CFSM 5.57 IN 75.69 AC-FT 6014000
WTR YR 1980 TOTAL 3004630 MEAN 8209 MAX 21300 MIN 2400 CFSM 5.51 IN 75.01 AC-FT 5960000

15302500 NUSHAGAK RIVER AT EKWOK
(National stream-quality accounting network station)

LOCATION.--Lat 59°20'57", long 157°28'23" (corrected), in SE¼SE¼ sec.35, T.9 S., R.48 W., Hydrologic Unit 19040002, on right bank at Ekwok, 0.6 mi (1.0 km) upstream from Klutuk Creek, and 40 mi (64 km) northeast of Dillingham.

DRAINAGE AREA.--9,850 mi^2 (25,500 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 90 ft (27 m), from topographic map. Prior to Apr. 17, 1979, at site 0.4 mi (0.6 km) downstream at different datum.

REMARKS.--Records good except those for period of no gage-height record, Nov. 16 to May 6, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 87,100 ft^3/s (2,470 m^3/s) Oct. 12, 1977, gage height, 10.64 ft (3.243 m), site and datum then in use; maximum gage height, 14.46 ft (4.407 m), site and datum then in use, in April 1979, from floodmarks, backwater from ice; minimum daily discharge, about 6,000 ft^3/s (170 m^3/s) Mar. 1 to 12, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 80,400 ft^3/s (2,280 m^3/s) July 14, gage height, 12.48 ft (3.804 m); minimum daily, about 10,000 ft^3/s (280 m^3/s) Feb. 19 to Mar. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26300	26100	18000	13000	11000	10000	13000	44000	67700	45800	43800	27100
2	25600	28200	18000	13000	11000	10000	14000	45000	64300	45100	43100	26700
3	26400	32400	18000	13000	11000	10000	15000	46000	60000	46100	42600	26300
4	28700	30300	17000	13000	11000	10000	15000	47000	60300	48200	43000	25400
5	30900	27500	17000	13000	11000	10000	16000	47000	61900	49400	41500	24700
6	32200	29500	17000	13000	11000	10000	18000	46000	64800	52100	38700	23900
7	32200	46700	17000	13000	11000	10000	19000	44500	69600	56600	36800	23000
8	31800	58400	17000	13000	11000	10000	20000	43400	76700	55600	36100	22500
9	34200	70200	17000	13000	11000	10000	21000	43700	78800	52600	36100	21900
10	40300	70600	16000	12000	11000	10000	22000	44100	72000	51200	36700	21500
11	40500	73500	16000	12000	11000	10000	23000	47600	66700	54500	40900	21200
12	39800	72700	16000	12000	11000	10000	23000	52400	66000	65300	43200	21000
13	39200	64400	16000	12000	11000	10000	23000	53600	64000	76600	42100	21600
14	38000	55700	16000	12000	11000	10000	24000	54700	60600	80300	39900	25300
15	36500	48300	16000	12000	11000	10000	24000	55300	57700	76400	39300	32200
16	35100	40000	16000	12000	11000	10000	25000	56100	54800	69400	39500	40000
17	34200	32000	15000	12000	11000	10000	25000	53600	51800	65300	40500	39300
18	33700	28000	15000	12000	11000	10000	26000	51600	49400	59900	40300	36000
19	33100	25000	15000	12000	10000	10000	27000	50900	47800	55600	39500	32600
20	32200	24000	15000	12000	10000	10000	27000	50000	46500	52000	39600	30100
21	31700	23000	15000	11000	10000	10000	28000	49100	50600	48900	39500	29100
22	31100	22000	15000	11000	10000	10000	29000	48600	58600	46400	39200	29600
23	30400	21000	14000	11000	10000	10000	30000	49000	57100	44800	38100	31100
24	28100	21000	14000	11000	10000	10000	31000	47600	52300	43900	35800	30800
25	27400	20000	14000	11000	10000	10000	32000	48100	50400	43000	33300	30100
26	27300	20000	14000	11000	10000	11000	33000	50400	52700	41100	31200	30400
27	26500	19000	14000	11000	10000	11000	35000	55700	54200	40200	29700	30600
28	24700	19000	14000	11000	10000	11000	37000	60100	51200	40200	28600	30800
29	24500	19000	14000	11000	10000	12000	39000	62800	49000	41500	27900	29800
30	24800	18000	14000	11000	---	12000	41000	63000	47600	42200	27400	28600
31	25300	---	14000	11000	---	13000	---	66100	---	43800	27200	---
TOTAL	972700	1085500	484000	370000	308000	320000	755000	1577000	1765100	1634000	1161100	843200
MEAN	31380	36180	15610	11940	10620	10320	25170	50870	58840	52710	37450	28110
MAX	40500	73500	18000	13000	11000	13000	41000	66100	78800	80300	43800	40000
MIN	24500	18000	14000	11000	10000	10000	13000	43400	46500	40200	27200	21000
CFSM	3.19	3.67	1.59	1.21	1.08	1.05	2.56	5.16	5.97	5.35	3.80	2.85
IN.	3.67	4.10	1.83	1.40	1.16	1.21	2.85	5.96	6.67	6.17	4.39	3.18
AC-FT	1929000	2153000	960000	733900	610900	634700	1498000	3128000	3501000	3241000	2303000	1672000

CAL YR 1979 TOTAL 9295800 MEAN 25470 MAX 73500 MIN 6000 CFSM 2.59 IN 35.11 AC-FT 18440000
WTR YR 1980 TOTAL 11275600 MEAN 30810 MAX 80300 MIN 10000 CFSM 3.13 IN 42.58 AC-FT 22370000

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 and 1980.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	PER- CENT OF TOTAL DEPTH	TEMPER- ATURE, WATER (DEG C)
OCT						
03...	1703	150	1.1	5.50	20	7.5
03...	1704	150	3.3	5.50	60	7.4
03...	1705	150	4.4	5.50	80	7.5
03...	1708	250	1.8	9.00	20	7.5
03...	1709	250	5.4	9.00	60	7.5
03...	1710	250	7.2	9.00	80	7.5
03...	1713	350	2.2	11.0	20	7.4
03...	1714	350	6.5	11.0	60	7.4
03...	1715	350	8.6	11.0	80	7.4
03...	1718	425	1.7	8.60	20	7.4
03...	1719	425	5.2	8.60	60	7.4
03...	1720	425	6.9	8.60	80	7.4
03...	1723	525	1.5	7.30	20	7.3
03...	1724	525	4.4	7.30	60	7.3
03...	1725	525	5.8	7.30	80	7.4
03...	1728	625	1.5	7.70	20	7.4
03...	1729	625	4.6	7.70	60	7.4
03...	1730	625	6.2	7.70	80	7.4
03...	1733	675	1.5	7.40	20	7.3
03...	1734	675	4.4	7.40	60	7.4
03...	1735	675	5.9	7.40	80	7.4
03...	1738	750	1.4	6.80	20	7.4
03...	1739	750	4.1	6.80	60	7.4
03...	1740	750	5.4	6.80	80	7.4
03...	1743	825	1.4	7.00	20	7.4
03...	1744	825	4.2	7.00	60	7.4
03...	1745	825	5.6	7.00	80	7.4
03...	1748	875	1.6	7.80	20	7.5
03...	1749	875	4.7	7.80	60	7.5
03...	1750	875	6.2	7.80	80	7.5

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	STREAM VELOC- ITY, POINT (FPS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)
OCT								
04...	1501	150	--	5.50	2.80	60	--	--
04...	1502	150	.3	5.50	--	55	6.4	7.3
04...	1506	250	--	9.00	3.00	60	--	--
04...	1507	250	.3	9.00	--	55	6.4	7.5
04...	1511	350	--	11.0	2.90	55	--	--
04...	1512	350	.3	11.0	--	55	6.2	7.4
04...	1516	425	--	8.60	2.80	55	--	--
04...	1517	425	.3	8.60	--	55	6.8	7.1
04...	1521	525	--	7.30	E4.00	60	--	--
04...	1522	525	.3	7.30	--	55	6.7	7.9
04...	1526	625	--	7.70	E4.80	60	--	--
04...	1527	625	.3	7.70	--	55	6.4	7.2
04...	1531	675	--	7.40	E5.20	60	--	--
04...	1532	675	.3	7.40	--	55	6.5	7.4
04...	1536	750	--	6.80	5.40	60	--	--
04...	1537	750	.3	6.80	--	55	6.4	--
04...	1541	825	--	7.00	E4.90	60	--	--
04...	1542	825	.3	7.00	--	--	--	--
04...	1546	875	--	7.80	E3.80	55	--	--
04...	1547	875	.3	--	--	55	6.2	7.3

E ESTIMATED

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT							
04...	--	--	23	6.9	7	57	580
04...	11.3	99	--	--	--	--	--
04...	--	--	24	6.4	11	55	550
04...	11.2	98	--	--	--	--	--
04...	--	--	24	7.7	9	61	550
04...	11.2	98	--	--	--	--	--
04...	--	--	23	6.4	9	65	560
04...	11.1	97	--	--	--	--	--
04...	--	--	24	6.7	9	54	530
04...	11.2	98	--	--	--	--	--
04...	--	--	24	7.2	7	60	570
04...	11.2	98	--	--	--	--	--
04...	--	--	24	6.7	8	66	600
04...	11.3	99	--	--	--	--	--
04...	--	--	24	6.9	7	67	560
04...	11.3	99	--	--	--	--	--
04...	--	--	24	6.9	6	70	560
04...	--	--	--	--	--	--	--
04...	--	--	24	7.2	5	67	650
04...	11.4	100	--	--	--	--	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
JAN										
29...	1401	830	60	7.0	.0	10.3	71	--	--	--
29...	1402	740	61	7.4	.0	10.1	69	--	--	--
29...	1403	650	60	6.8	.0	10.1	69	--	--	--
29...	1404	560	60	6.6	.0	--	--	--	--	--
29...	1405	320	60	6.6	.0	9.5	65	--	--	--
APR										
08...	1501	715	45	6.0	.2	11.9	82	18	3.0	460
08...	1502	565	44	6.2	.2	--	--	18	2.9	470
08...	1503	465	43	6.2	.2	11.8	81	18	1.9	520
08...	1504	285	41	6.2	.2	--	--	16	2.1	550
08...	1505	165	40	6.2	.2	11.8	81	16	2.9	620
JUN										
05...	1701	800	40	6.4	7.8	12.4	104	--	--	--
05...	1702	650	40	6.5	7.8	12.4	104	--	--	--
05...	1703	450	40	6.5	8.0	12.3	103	--	--	--
05...	1704	300	40	6.6	8.1	12.2	103	--	--	--
05...	1705	150	40	6.6	8.3	12.1	102	--	--	--
JUL										
23...	1931	325	60	7.0	16.3	9.8	99	--	--	--
23...	1932	625	60	7.0	16.3	9.9	100	--	--	--
23...	1933	850	60	7.1	16.3	9.9	100	--	--	--
SEP										
30...	1746	275	58	6.8	6.0	10.7	88	--	--	--
30...	1747	600	58	6.7	6.0	11.1	91	--	--	--
30...	1748	800	58	6.6	6.1	11.9	98	--	--	--

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
03...	1700	950	26500	--	--	--	--	--	--	--	--
04...	1500	950	29000	55	6.6	--	12	--	K8	K4	23
JAN											
29...	1400	905	11200	60	7.0	.0	1.0	762	K2	<1	24
APR											
08...	1500	915	20000	44	--	--	1.7	759	K2	K1	15
JUN											
05...	1700	1020	65500	--	6.5	--	5.2	764	K7	K2	17
JUL											
23...	1930	990	45300	60	--	16.5	3.2	761	K3	K1	23
SEP											
30...	1745	975	29800	58	6.7	6.0	1.6	745	K3	<1	22

K NON-IDEAL COLONY COUNT

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT											
03...	--	--	--	--	--	--	--	--	--	--	--
04...	4	6.4	1.6	1.7	.3	23	0	7.2	1.1	.2	7.7
JAN											
29...	0	7.0	1.6	1.9	.4	29	0	3.2	1.1	.1	10
APR											
08...	1	4.4	1.0	1.6	.4	17	0	1.6	1.4	.0	7.2
JUN											
05...	2	4.8	1.3	1.5	.3	18	0	3.6	2.0	.0	5.9
JUL											
23...	2	6.7	1.6	1.7	.3	26	0	4.0	.7	.1	6.4
SEP											
30...	0	6.0	1.6	1.9	.4	26	0	3.5	1.2	.1	7.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)
OCT											
03...	--	--	--	--	--	--	--	--	--	--	--
04...	35	38	.05	.05	.010	.030	.44	.23	.45	.19	.26
JAN											
29...	37	40	.15	.15	.030	.030	.12	.12	.15	.00	.15
APR											
08...	33	26	.03	.04	.000	.000	1.1	.27	1.1	.83	.27
JUN											
05...	29	29	.09	.06	.150	.030	.22	.37	.37	.00	.40
JUL											
23...	33	35	.00	.06	.000	.000	.90	.49	.90	.41	.49
SEP											
30...	42	35	.00	.00	.000	.000	.37	.26	.37	.11	.26

DATE	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
03...	--	--	--	--	--	--	--	--	--	--	--
04...	.50	.31	.010	.000	--	--	2.5	.8	8	626	63
JAN											
29...	.30	.30	.010	.010	--	2.5	--	--	3	91	--
APR											
08...	1.1	.31	.030	.010	--	--	3.6	.1	6	324	--
JUN											
05...	.46	.46	.160	.020	--	--	3.7	--	27	4780	60
JUL											
23...	.90	.55	.020	.010	--	--	2.6	.2	8	978	72
SEP											
30...	.37	.26	.030	.010	.000	--	4.9	--	6	483	49

K NON-IDEAL COLONY COUNT

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT											
04...	1500	1	0	1	--	--	10	0	0	<1	10
JAN											
29...	1400	--	--	--	--	--	--	--	--	--	--
APR											
08...	1500	1	0	2	100	80	20	0	0	<1	10
JUN											
05...	1700	4	3	1	0	0	10	1	--	<1	0
JUL											
23...	1930	--	--	--	--	--	--	--	--	--	--
SEP											
30...	1745	2	1	1	200	200	0	0	0	0	20

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT											
04...	10	0	0	0	<3	4	3	1	640	440	200
JAN											
29...	--	--	--	--	--	--	--	--	--	--	--
APR											
08...	10	0	0	0	<3	4	2	2	440	270	170
JUN											
05...	0	0	0	--	<3	21	12	9	890	720	170
JUL											
23...	--	--	--	--	--	--	--	--	--	--	--
SEP											
30...	0	20	0	0	0	4	3	1	560	350	210

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)
OCT											
04...	7	5	2	--	--	6	.1	.0	.1	--	--
JAN											
29...	--	--	--	--	--	--	--	--	--	--	--
APR											
08...	1	1	0	30	10	20	.0	.0	.0	7	7
JUN											
05...	51	44	7	40	30	8	.1	.1	.0	3	0
JUL											
23...	--	--	--	--	--	--	--	--	--	--	--
SEP											
30...	4	4	0	30	10	20	.0	.0	.1	0	0

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
04...	--	0	0	0	0	0	0	40	40	<3
JAN										
29...	--	--	--	--	0	--	--	--	--	--
APR										
08...	0	0	0	0	0	0	0	0	0	<3
JUN										
05...	4	0	0	0	0	0	0	30	20	8
JUL										
23...	--	--	--	--	0	--	--	--	--	--
SEP										
30...	0	0	0	0	0	0	0	20	0	30

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	OCT 4,79 1500	JAN 29,80 1400	APR 8,80 1500	JUN 5,80 1700	JUL 23,80 1930	SEP 30,80 1745
TOTAL CELLS/ML	390	29	280	390	26	370
DIVERSITY: DIVISION	0.9	1.2	0.8	1.5	0.0	0.8
.CLASS	0.9	1.2	0.8	1.5	0.0	0.8
..ORDER	1.0	1.9	1.0	1.8	0.0	1.3
...FAMILY	1.0	2.7	1.0	2.3	1.0	1.5
....GENUS	1.0	3.1	1.0	2.4	1.0	1.6

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...COELASTRACEAE												
....COELASTRUM	--	-	--	-	--	-	65#	17	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	1	4	13	5	--	-	--	-	--	-
..ZYGNEMATALES												
...DESMIDIACEAE												
....COSMARIUM	13	3	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	1	4	13	5	13	3	--	-	--	-
....MELOSIRA	39	10	8#	28	--	-	26	7	--	-	260#	69
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	2	8	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	1	4	--	-	--	-	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	--	-	--	-	--	-	13	3
...DIATOMACEAE												
....DIATOMA	--	-	1	4	--	-	52	13	--	-	--	-
...EUNOTIACEAE												
....EUNOTIA	--	-	1	4	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....FRAGILARIA	--	-	2	8	13	5	--	-	13#	50	13	3
....SYNEDRA	--	-	1	4	--	-	52	13	--	-	13	3
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	1	4	--	-	--	-	--	-	13	3
...NAVICULACEAE												
....NAVICULA	--	-	--	-	--	-	--	-	13#	50	--	-
...NITZSCHIACEAE												
....NITZSCHIA	26	7	--	-	13	5	26	7	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	150#	40	--	-	52	14
..HORMOGONALES												
...OSCILLATORIACEAE												
....OSCILLATORIA	310#	80	--	-	230#	82	--	-	--	-	--	-
....SCHIZOTHRIX	--	-	7#	24	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	--	-	--	-	--	-	13	3
....TRACHELOMONAS	--	-	1	4	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

15302840 ELVA LAKE OUTLET NEAR ALEGNAGIK

LOCATION.--Lat 59°36'15, long 159°06'50", in NE¼NE¼ sec.3, T.7 S., R.58 W., Hydrologic Unit 19040002, on right bank 200 ft (60 m) downstream from Elva Lake outlet and 30 mi (48 km) northwest of Dillingham. Prior to June 26, 1980, at site 300 ft (90 m) downstream.

DRAINAGE AREA.--9.00 mi^2 (23.3 km^2).

PERIOD OF RECORD.--October 1979 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (91 m), from topographic map. Prior to June 26, 1980, at site 300 ft (90 m) downstream at datum 3.48 ft (1.061 m) lower.

REMARKS.--Records poor. Several observations of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 360 ft^3/s (10.2 m^3/s) about June 5, gage height, 5.4 ft (1.65 m), from floodmarks, site and datum then in use, from rating curve extended above 210 ft^3/s (59 m); minimum daily, about 1 ft^3/s (0.03 m^3/s) Dec. 29 to Feb. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	108	30	1.0	1.0	2.0	5.0	26	310	169	70	42
2	130	109	28	1.0	1.0	2.0	5.0	28	330	209	68	41
3	140	101	26	1.0	1.0	2.0	6.0	30	340	216	64	40
4	150	94	24	1.0	1.0	2.0	7.0	32	350	189	62	38
5	150	101	22	1.0	1.0	2.0	8.0	34	350	205	60	36
6	160	153	19	1.0	1.0	2.0	8.0	36	350	235	56	35
7	170	139	18	1.0	1.0	2.0	9.0	38	330	220	54	35
8	170	132	17	1.0	1.0	2.0	9.0	40	320	204	50	35
9	170	130	15	1.0	2.0	2.0	10	42	320	183	49	35
10	170	120	14	1.0	2.0	2.0	10	44	340	165	47	36
11	160	130	13	1.0	2.0	2.0	10	46	340	187	45	37
12	153	130	11	1.0	2.0	2.0	11	50	330	229	44	42
13	145	140	10	1.0	2.0	2.0	11	55	320	227	42	45
14	137	150	9.0	1.0	2.0	2.0	12	60	300	216	42	50
15	133	160	8.0	1.0	2.0	2.0	12	65	290	191	42	55
16	131	160	7.0	1.0	2.0	3.0	13	70	290	165	43	55
17	133	140	6.0	1.0	2.0	3.0	13	75	280	150	45	52
18	130	130	5.0	1.0	2.0	3.0	14	80	270	143	50	50
19	123	120	5.0	1.0	2.0	3.0	15	90	270	139	60	48
20	117	110	4.0	1.0	2.0	3.0	15	100	300	139	70	48
21	112	100	4.0	1.0	2.0	3.0	16	110	300	147	70	47
22	106	90	3.0	1.0	2.0	3.0	17	120	290	152	64	46
23	102	80	3.0	1.0	2.0	3.0	18	130	280	150	60	46
24	101	75	2.0	1.0	2.0	3.0	18	140	260	139	55	45
25	96	70	2.0	1.0	2.0	3.0	19	160	230	130	50	45
26	93	60	2.0	1.0	2.0	3.0	20	180	209	125	45	45
27	91	55	2.0	1.0	2.0	4.0	21	200	196	114	43	47
28	89	50	2.0	1.0	2.0	4.0	22	230	178	106	40	55
29	89	40	1.0	1.0	2.0	4.0	23	250	163	97	38	75
30	89	35	1.0	1.0	---	4.0	24	280	161	88	38	70
31	90	---	1.0	1.0	---	4.0	---	300	---	79	40	---
TOTAL	3960	3212	314.0	31.0	50.0	83.0	401.0	3141	8597	5108	1606	1376
MEAN	128	107	10.1	1.00	1.72	2.68	13.4	101	287	165	51.8	45.9
MAX	170	160	30	1.0	2.0	4.0	24	300	350	235	70	75
MIN	89	35	1.0	1.0	1.0	2.0	5.0	26	161	79	38	35
CFSM	14.2	11.9	1.12	.11	.19	.30	1.49	11.2	31.9	18.3	5.76	5.10
IN.	16.37	13.27	1.30	.13	.21	.34	1.66	12.98	35.53	21.11	6.64	5.69
AC-FT	7850	6370	623	61	99	165	795	6230	17050	10130	3190	2730

WTR YR 1980 TOTAL 27879.0 MEAN 76.2 MAX 350 MIN 1.0 CFSM 8.47 IN 115.22 AC-FT 55300

NOTE.--No gage-height record Nov. 9 to June 25 and Aug. 4 to Sept. 30.

15303150 SNAKE RIVER NEAR DILLINGHAM

LOCATION.--Lat 59°08'54", long 158°53'14", in NW¼SW¼ sec.9, T.12 S., R.57 W., Hydrologic Unit 19040002, on right bank at outlet of Lake Nunavaugaluk, 15 mi (24 km) northwest of Dillingham.

DRAINAGE AREA.--113 mi^2 (293 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 34 ft (10.4 m), from topographic map.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Dec. 7 to May 5, which are poor. Discharge affected by storage in Lake Nunavaugaluk, surface area of 32 mi^2 (83 km^2).

AVERAGE DISCHARGE.--7 years, 546 ft^3/s (15.46 m^3/s), 65.62 in/yr (1,667 mm/yr), 395,600 acre-ft/yr (488 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft^3/s (70.0 m^3/s) June 17, 1977, gage height, 6.81 ft (2.076 m); minimum daily, about 70 ft^3/s (2.0 m^3/s) Jan. 31 and Feb. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,160 ft^3/s (61.2 m^3/s) May 27, gage height, 6.53 ft (1.990 m); minimum daily, about 260 ft^3/s (7.4 m^3/s) Feb. 6 to Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	538	838	762	320	280	260	260	400	1940	935	538	373
2	615	868	720	320	280	260	260	420	1930	942	532	349
3	727	875	706	320	280	260	260	440	1910	935	532	343
4	860	860	699	300	280	260	260	460	1900	928	506	325
5	935	875	664	300	280	260	260	500	1830	1010	500	319
6	988	1030	660	300	260	260	260	545	1840	1030	480	307
7	1020	1090	620	300	260	260	260	601	1800	1030	480	307
8	1190	1120	600	300	260	260	260	650	1730	1020	480	290
9	1300	1220	600	300	260	260	260	727	1680	996	460	273
10	1350	1400	580	300	260	260	260	852	1670	1000	454	268
11	1400	1460	540	300	260	260	260	972	1660	1070	460	268
12	1440	1460	520	300	260	260	260	1090	1610	1080	454	290
13	1420	1420	500	300	260	260	260	1260	1540	1080	441	301
14	1380	1360	480	300	260	260	260	1350	1480	1060	441	349
15	1350	1440	460	300	260	260	260	1390	1430	1040	434	361
16	1280	1400	460	300	260	260	260	1420	1360	1000	428	367
17	1260	1360	440	300	260	260	260	1440	1310	965	428	367
18	1230	1310	440	280	260	260	260	1540	1250	935	454	373
19	1170	1250	420	280	260	260	260	1570	1180	898	460	373
20	1120	1180	420	280	260	260	260	1590	1200	875	460	373
21	1080	1130	400	280	260	260	280	1600	1160	830	460	391
22	1030	1060	380	280	260	260	280	1600	1140	800	448	409
23	980	996	380	280	260	260	280	1650	1110	778	441	420
24	928	965	360	280	260	260	300	1740	1100	734	428	420
25	882	950	360	280	260	260	300	1840	1110	706	409	420
26	845	950	340	280	260	260	320	2000	1090	678	403	440
27	800	905	340	280	260	260	320	2120	1040	636	391	460
28	770	905	340	280	260	260	340	2120	1020	629	385	500
29	755	800	340	280	260	260	360	2090	980	601	373	520
30	748	762	320	280	---	260	380	2060	950	587	379	500
31	741	---	320	280	---	260	---	2000	---	559	379	---
TOTAL	32132	33239	15171	9080	7640	8060	8360	40037	42950	27367	13918	11056
MEAN	1037	1108	489	293	263	260	279	1292	1432	883	449	369
MAX	1440	1460	762	320	280	260	380	2120	1940	1080	538	520
MIN	538	762	320	280	260	260	260	400	950	559	373	268
CFSM	9.18	9.81	4.33	2.59	2.33	2.30	2.47	11.4	12.7	7.81	3.97	3.27
IN.	10.58	10.94	4.99	2.99	2.52	2.65	2.75	13.18	14.14	9.01	4.58	3.64
AC-FT	63730	65930	30090	18010	15150	15990	16580	79410	85190	54280	27610	21930

CAL YR 1979 TOTAL 270354 MEAN 741 MAX 1620 MIN 220 CFSM 6.56 IN 89.00 AC-FT 536200
WTR YR 1980 TOTAL 249010 MEAN 680 MAX 2120 MIN 260 CFSM 6.02 IN 81.97 AC-FT 493900

15303150 SNAKE RIVER NEAR DILLINGHAM--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1974 to July 1976, October 1976 to November 1977, April and May 1978, and January 1979 to September 1980 (discontinued).

INSTRUMENTATION.--Temperature recorder since Aug. 22, 1974.

REMARKS.--No record Dec. 28 to Jan. 26 due to recorder malfunction. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on Oct. 11, Jan. 28, Apr. 9, July 22, and Sept. 23. A maximum variation of 4.0°C was found within the section on July 22.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES (water years 1974-77 and 1979-80): Maximum, 19.5°C July 23, 1980, minimum, 0.0°C on many days during winter periods most years.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 19.5°C July 23; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE, WATER (DEG C)
OCT					
11...	1430	199	--	1410	--
11...	1431	--	16	--	6.8
11...	1432	--	51	--	7.0
11...	1433	--	91	--	6.9
11...	1434	--	121	--	6.8
11...	1435	--	151	--	6.9
11...	1436	--	171	--	6.9
11...	1437	--	191	--	7.0
JAN					
28...	1500	181	12	279	.6
28...	1501	--	42	--	.8
28...	1502	--	72	--	1.0
28...	1503	--	97	--	.9
28...	1504	--	122	--	.8
28...	1505	--	142	--	.8
28...	1506	--	172	--	.6
APR					
09...	1040	197	--	262	--
09...	1041	--	4.0	--	1.4
09...	1042	--	14	--	1.4
09...	1043	--	34	--	1.5
09...	1044	--	54	--	1.6
09...	1045	--	74	--	1.6
09...	1046	--	94	--	1.5
09...	1047	--	114	--	1.5
09...	1048	--	134	--	1.4
09...	1049	--	154	--	1.4
09...	1050	--	174	--	1.5
09...	1051	--	194	--	2.2
JUL					
22...	1410	--	E5.0	E700	14.0
22...	1411	--	E25	--	12.2
22...	1412	--	E45	--	11.9
22...	1413	--	E65	--	12.6
22...	1414	--	E85	--	12.8
22...	1415	--	E105	--	14.2
22...	1416	--	E125	--	13.4
22...	1417	--	E145	--	13.0
22...	1418	--	E165	--	13.0
22...	1419	--	E185	--	13.0
22...	1420	--	E205	--	15.9
SEP					
23...	1631	216	6.0	401	11.0
23...	1632	--	26	--	10.7
23...	1633	--	46	--	10.7
23...	1634	--	66	--	10.6
23...	1635	--	86	--	10.5
23...	1636	--	106	--	10.5
23...	1637	--	126	--	10.5
23...	1638	--	146	--	10.5
23...	1639	--	166	--	10.5
23...	1640	--	186	--	10.6
23...	1641	--	206	--	10.8

15303150 SNAKE RIVER NEAR DILLINGHAM--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.0	9.0	6.0	6.0	4.0	3.5	---	---	.5	.5	1.0	1.0
2	9.0	8.5	6.0	5.5	3.5	3.5	---	---	.5	.5	1.0	1.0
3	9.0	8.5	5.5	5.0	3.5	3.5	---	---	.5	.5	1.5	1.0
4	8.5	8.0	6.0	5.0	3.5	3.0	---	---	.5	.5	1.5	1.0
5	8.5	8.0	6.0	6.0	3.0	3.0	---	---	.5	.5	1.0	.5
6	9.0	8.5	6.0	6.0	3.0	2.5	---	---	.5	.5	1.0	.5
7	8.5	8.5	6.0	6.0	3.0	2.0	---	---	.5	.5	.5	.5
8	8.5	8.5	6.0	6.0	2.0	1.5	---	---	.5	.5	1.0	.5
9	8.5	8.5	6.0	6.0	2.0	.5	---	---	.5	.5	1.0	.5
10	8.5	6.5	6.0	6.0	2.5	.5	---	---	.5	.5	.5	.5
11	7.5	6.5	6.0	5.5	2.5	.5	---	---	1.0	.5	1.0	.5
12	7.5	6.5	5.5	5.5	.5	.5	---	---	1.0	1.0	1.0	.5
13	7.5	7.5	5.5	4.5	.5	.5	---	---	1.0	1.0	1.0	.0
14	7.5	7.0	5.5	5.0	.5	.5	---	---	1.5	1.0	.5	.5
15	7.0	7.0	5.5	5.0	.5	.5	---	---	1.5	1.0	.5	.0
16	7.0	7.0	5.0	5.0	.5	.5	---	---	1.5	1.0	1.0	.0
17	7.5	7.0	5.0	4.0	.5	.5	---	---	1.5	1.0	.5	.0
18	7.5	7.0	5.0	3.5	.5	.5	---	---	1.0	.5	.5	.5
19	7.5	7.0	4.0	3.5	.5	.5	---	---	1.5	.5	1.0	.0
20	7.0	7.0	4.0	3.5	.5	.5	---	---	1.0	.5	1.0	.0
21	7.0	6.5	4.0	2.5	.5	.5	---	---	1.0	1.0	.5	.5
22	6.5	5.0	3.5	2.0	.5	.5	---	---	1.0	1.0	.5	.5
23	6.5	5.5	3.5	3.5	.5	.5	---	---	1.0	.5	.5	.5
24	6.5	6.0	4.0	3.5	.5	.5	---	---	1.0	1.0	1.0	.5
25	6.0	6.0	4.5	2.5	.5	.5	---	---	1.0	1.0	1.5	.5
26	6.0	5.0	3.5	3.0	.5	.5	---	---	1.0	.5	1.0	.5
27	6.0	5.0	3.5	2.5	.5	.5	.5	.5	.5	.5	1.5	.5
28	5.5	4.5	4.5	4.0	---	---	.5	.5	1.0	.5	2.0	.0
29	6.0	4.5	4.5	3.5	---	---	.5	.5	1.0	1.0	.5	.5
30	6.0	5.5	4.0	3.5	---	---	.5	.5	---	---	1.0	.0
31	6.0	5.5	---	---	---	---	.5	.5	---	---	1.5	.0
MONTH	9.0	4.5	6.0	2.0	4.0				1.5	.5	2.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.5	.5	4.5	1.5	5.0	4.5	7.5	5.5	14.5	13.0	13.5	10.0
2	2.0	.5	2.5	1.5	4.5	4.0	5.0	4.5	13.5	8.5	12.5	9.5
3	1.0	.5	2.5	2.0	4.0	4.0	7.0	5.0	13.5	12.0	11.5	9.5
4	1.0	.5	3.0	1.5	4.5	4.5	8.0	5.5	13.5	11.5	13.0	9.5
5	2.0	.5	3.5	1.5	5.0	4.5	8.0	6.5	12.5	11.0	12.0	10.0
6	2.0	.5	3.5	1.5	6.0	5.0	7.0	5.5	11.0	8.5	12.0	9.5
7	3.0	.5	2.5	1.5	7.5	5.5	6.5	6.0	10.0	8.5	11.5	8.5
8	2.5	.5	4.0	2.0	7.5	5.0	6.5	6.0	13.5	8.5	13.0	9.5
9	2.5	.5	3.0	3.0	5.0	5.0	7.0	6.5	12.5	11.5	12.0	10.5
10	3.0	.5	2.5	2.0	5.0	5.0	7.0	6.5	14.0	12.0	11.5	10.0
11	3.0	.5	3.0	2.5	5.0	4.5	6.0	6.0	13.5	12.0	12.5	9.5
12	2.5	.5	3.0	2.0	6.5	5.0	6.5	6.0	14.0	11.5	10.5	9.5
13	1.5	.5	3.0	2.0	8.5	5.5	9.5	6.5	14.5	11.5	10.5	9.5
14	3.0	1.0	4.0	2.5	8.5	6.5	8.5	7.5	12.5	11.5	11.5	10.5
15	3.5	1.0	3.0	1.5	6.5	5.5	10.5	8.0	12.0	11.0	11.5	10.5
16	3.5	.5	3.5	1.0	5.5	5.0	11.5	8.5	12.5	11.5	12.5	10.5
17	4.0	1.0	3.0	3.0	5.5	4.5	12.5	10.0	11.5	7.5	11.5	10.5
18	3.5	1.0	3.5	3.0	5.5	5.0	12.5	10.5	8.5	6.0	12.0	10.0
19	3.5	1.0	5.0	1.0	5.0	4.5	13.5	10.5	11.5	8.5	11.0	9.5
20	1.5	1.0	4.5	2.5	5.0	4.0	14.5	12.0	11.5	10.0	10.5	10.0
21	2.5	1.0	5.5	3.5	5.0	4.0	15.0	12.0	13.5	10.5	10.5	10.5
22	3.0	1.5	4.5	3.5	6.0	4.5	17.5	11.5	13.5	10.5	11.0	10.0
23	2.5	1.0	4.0	4.0	6.0	5.0	19.5	15.0	14.0	11.0	11.0	10.5
24	4.5	1.0	4.0	3.5	5.0	5.0	18.0	12.5	13.5	11.5	11.0	10.0
25	3.0	1.0	3.5	3.5	6.0	4.5	18.5	12.5	14.5	11.5	10.5	9.5
26	2.0	1.5	4.0	3.5	8.0	6.0	18.5	12.5	14.5	11.5	9.5	9.0
27	4.0	.5	5.0	3.5	7.5	7.0	12.5	8.5	12.5	11.5	9.0	6.0
28	3.5	1.5	5.0	4.0	8.5	5.5	14.5	9.5	13.5	11.5	9.0	5.5
29	2.5	.5	4.5	4.0	8.5	6.5	14.5	11.5	13.0	11.5	9.5	7.5
30	4.0	2.5	5.5	4.0	8.5	6.5	13.5	12.5	11.5	11.5	9.0	8.5
31	---	---	5.0	4.0	---	---	14.5	13.0	15.0	11.0	---	---
MONTH	4.5	.5	5.5	1.0	8.5	4.0	19.5	4.5	15.0	6.0	13.5	5.5
YEAR	19.5	.0										

15304000 KUSKOKWIM RIVER AT CROOKED CREEK
(National stream-quality accounting and radiochemical networks station)

LOCATION.--Lat 61°52'16", long 158°06'03", in NE¼NE¼ sec.32, T.21 N., R.48 W., Hydrologic Unit 19040001, on right bank at village of Crooked Creek, 0.5 mi (0.8 km) upstream from Crooked Creek.

DRAINAGE AREA.--31,100 mi^2 (80,500 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 200 ft (61 m), from topographic map. Prior to Aug. 6, 1977, nonrecording gage at site 600 ft (180 m) downstream at same datum.

REMARKS.--Records poor prior to June 18, good thereafter.

AVERAGE DISCHARGE.--29 years, 41,490 ft^3/s (1,175 m^3/s), 18.12 in/yr (460 mm/yr), 30,060,000 acre-ft/yr (37.1 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 392,000 ft^3/s (11,100 m^3/s) June 5, 1964, gage height, 25.74 ft (7.846 m); maximum gage height, 26.36 ft (8.034 m) about May 16, 1968, from floodmarks, backwater from ice; minimum daily discharge, about 6,100 ft^3/s (170 m^3/s) Mar. 1-31, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 181,000 ft^3/s (5,120 m^3/s) July 17, gage height, 15.04 ft (4.585 m); minimum daily, about 10,000 ft^3/s (280 m^3/s) Mar. 7 to Apr. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45500	20000	15000	15000	12000	12000	10000	105000	110000	85700	118000	66400
2	44100	20000	15000	15000	12000	12000	10000	115000	100000	85200	118000	64500
3	42800	20000	15000	15000	12000	12000	10000	120000	100000	87700	113000	63500
4	42300	20000	15000	15000	12000	12000	10000	130000	100000	88600	106000	61500
5	41400	20000	15000	15000	12000	12000	10000	130000	100000	90700	98400	59200
6	40700	20000	15000	12000	12000	12000	10000	130000	100000	92900	92500	57500
7	40400	20000	15000	12000	12000	10000	10000	130000	100000	93900	88000	56000
8	40000	15000	15000	12000	12000	10000	10000	130000	100000	96600	86600	54200
9	39700	15000	15000	12000	12000	10000	10000	125000	95000	99300	85900	52200
10	40100	15000	15000	12000	12000	10000	10000	125000	90000	100000	86500	50200
11	40200	15000	15000	12000	12000	10000	10000	120000	90000	105000	87700	48400
12	40700	15000	15000	12000	12000	10000	10000	120000	90000	121000	89300	47200
13	37000	15000	15000	12000	12000	10000	10000	120000	90000	145000	91500	46900
14	37000	15000	15000	12000	12000	10000	15000	120000	90000	157000	95300	47700
15	37000	15000	15000	12000	12000	10000	15000	120000	85000	172000	96400	51200
16	35000	15000	15000	12000	12000	10000	15000	120000	85000	179000	95200	59600
17	35000	15000	15000	12000	12000	10000	15000	120000	85000	179000	96200	74200
18	35000	15000	15000	12000	12000	10000	15000	120000	85000	174000	102000	78500
19	30000	15000	15000	12000	12000	10000	20000	110000	79600	164000	105000	75900
20	30000	15000	15000	12000	12000	10000	20000	110000	78300	151000	113000	75200
21	30000	15000	15000	12000	12000	10000	25000	110000	82200	138000	116000	74200
22	30000	15000	15000	12000	12000	10000	30000	110000	88900	126000	112000	70900
23	25000	15000	15000	12000	12000	10000	35000	110000	95800	117000	106000	67800
24	25000	15000	15000	12000	12000	10000	40000	110000	97300	110000	98600	66200
25	25000	15000	15000	12000	12000	10000	45000	110000	95300	104000	91600	64800
26	25000	15000	15000	12000	12000	10000	50000	110000	91300	101000	86000	62900
27	25000	15000	15000	12000	12000	10000	60000	110000	88500	100000	80700	61100
28	25000	15000	15000	12000	12000	10000	70000	110000	88900	102000	76200	58700
29	25000	15000	15000	12000	12000	10000	80000	110000	88600	109000	73200	56700
30	20000	15000	15000	12000	---	10000	90000	110000	87400	114000	71700	54900
31	20000	---	15000	12000	---	10000	---	110000	---	116000	69200	---
TOTAL	1048900	485000	465000	387000	348000	322000	770000	3630000	2757100	3704600	2945700	1828200
MEAN	33840	16170	15000	12480	12000	10390	25670	117100	91900	119500	95020	60940
MAX	45500	20000	15000	15000	12000	12000	90000	130000	110000	179000	118000	78500
MIN	20000	15000	15000	12000	12000	10000	10000	105000	78300	85200	69200	46900
CFSM	1.09	.52	.48	.40	.39	.33	.83	3.77	2.96	3.84	3.06	1.96
IN.	1.25	.58	.56	.46	.42	.39	.92	4.34	3.30	4.43	3.52	2.19
AC-FT	2080000	962000	922300	767600	690300	638700	1527000	7200000	5469000	7348000	5843000	3626000

CAL YR 1979 TOTAL 14213000 MEAN 38940 MAX 100000 MIN 10000 CFSM 1.25 IN 17.00 AC-FT 28190000
WTR YR 1980 TOTAL 18691500 MEAN 51070 MAX 179000 MIN 10000 CFSM 1.64 IN 22.36 AC-FT 37070000

NOTE.--No gage-height record Oct. 12 to June 17.

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951, 1955-72, 1974 to current year.

REMARKS.--Water-temperature recorder lost, no record of daily temperatures for this year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	PER-CENT OF TOTAL DEPTH	STREAM VELOC-ITY, POINT (FPS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)
OCT								
12...	1201	425	--	7.00	--	E2.90	140	--
12...	1202	425	.3	7.00	--	--	140	7.2
12...	1203	425	1.4	7.00	20	--	--	--
12...	1204	425	4.2	7.00	60	--	--	--
12...	1205	425	5.6	7.00	80	--	--	--
12...	1206	550	--	14.0	--	3.60	149	--
12...	1207	550	.3	14.0	--	--	148	7.2
12...	1208	550	2.7	14.0	20	4.10	150	--
12...	1209	550	8.2	14.0	60	--	150	--
12...	1210	550	11.0	14.0	80	3.10	150	--
12...	1211	625	--	16.0	--	E3.50	151	--
12...	1212	625	.3	16.0	--	--	150	7.2
12...	1213	625	3.1	16.0	20	E4.10	--	--
12...	1214	625	9.3	16.0	60	--	--	--
12...	1215	625	12.0	16.0	80	E2.90	--	--
12...	1216	700	--	19.0	--	3.40	164	--
12...	1217	700	.3	19.0	--	--	162	7.4
12...	1218	700	3.7	19.0	20	4.60	--	--
12...	1219	700	11.0	19.0	60	--	--	--
12...	1220	700	15.0	19.0	80	2.20	--	--
12...	1221	750	--	19.0	--	4.30	168	--
12...	1222	750	.3	19.0	--	--	170	7.4
12...	1223	750	3.4	19.0	20	4.60	--	--
12...	1224	750	11.0	19.0	60	--	--	--
12...	1225	750	15.0	19.0	80	4.00	--	--
12...	1226	800	--	23.0	--	3.40	176	--
12...	1227	800	.3	23.0	--	--	174	7.4
12...	1228	800	4.6	23.0	20	3.70	176	--
12...	1229	800	14.0	23.0	60	--	175	--
12...	1230	800	18.0	23.0	80	3.10	175	--
12...	1231	850	--	25.0	--	3.50	181	--
12...	1232	850	.3	25.0	--	--	181	7.4
12...	1233	850	4.9	25.0	20	4.00	--	--
12...	1234	850	15.0	25.0	60	--	--	--
12...	1235	850	20.0	25.0	80	3.00	--	--
12...	1236	900	--	25.0	--	2.70	186	--
12...	1237	900	.3	25.0	--	--	186	7.4
12...	1238	900	5.0	25.0	20	2.90	186	--
12...	1239	900	15.0	25.0	60	--	186	--
12...	1240	900	20.0	25.0	80	2.50	186	--
12...	1241	975	--	20.0	--	E2.40	189	--
12...	1242	975	.3	20.0	--	--	190	7.2
12...	1243	975	3.9	20.0	20	E2.70	--	--
12...	1244	975	12.0	20.0	60	--	--	--
12...	1245	975	16.0	20.0	80	E2.00	--	--
12...	1246	1100	--	8.50	--	2.50	190	--
12...	1247	1100	.3	8.50	--	--	190	7.2
12...	1248	1100	1.7	8.50	20	2.70	--	--
12...	1249	1100	5.1	8.50	60	--	--	--
12...	1250	1100	6.8	8.50	80	2.20	--	--

E ESTIMATED

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT								
12...	--	--	--	70	13	18	60	1100
12...	5.6	11.8	95	--	--	--	--	--
12...	5.6	--	--	--	--	--	--	--
12...	5.6	--	--	--	--	--	--	--
12...	5.6	--	--	--	--	--	--	--
12...	--	--	--	75	14	38	31	1200
12...	5.5	11.9	96	--	--	--	--	--
12...	5.7	--	--	74	14	21	49	1100
12...	5.6	--	--	74	14	26	44	1400
12...	5.6	--	--	75	15	36	32	1300
12...	--	--	--	76	15	49	23	1300
12...	5.5	11.9	96	--	--	--	--	--
12...	5.6	--	--	--	--	--	--	--
12...	5.6	--	--	--	--	--	--	--
12...	5.6	--	--	--	--	--	--	--
12...	--	--	--	87	16	67	17	1300
12...	5.5	12.0	97	--	--	--	--	--
12...	5.7	--	--	--	--	--	--	--
12...	5.5	--	--	--	--	--	--	--
12...	5.5	--	--	--	--	--	--	--
12...	--	--	--	88	16	59	21	1300
12...	5.5	11.9	96	--	--	--	--	--
12...	5.6	--	--	--	--	--	--	--
12...	5.5	--	--	--	--	--	--	--
12...	5.4	--	--	--	--	--	--	--
12...	--	--	--	91	17	26	45	1200
12...	5.4	12.0	97	--	--	--	--	--
12...	5.6	--	--	91	18	18	57	1300
12...	5.4	--	--	93	18	28	42	1300
12...	5.4	--	--	91	17	29	39	1300
12...	--	--	--	96	18	25	42	1300
12...	5.3	12.0	97	--	--	--	--	--
12...	5.4	--	--	--	--	--	--	--
12...	5.4	--	--	--	--	--	--	--
12...	5.4	--	--	--	--	--	--	--
12...	--	--	--	97	19	23	46	1300
12...	5.3	12.0	97	--	--	--	--	--
12...	5.4	--	--	97	19	14	63	1300
12...	5.3	--	--	97	18	21	49	1200
12...	5.3	--	--	97	18	32	32	1200
12...	--	--	--	97	18	13	64	1200
12...	5.2	12.0	96	--	--	--	--	--
12...	5.4	--	--	--	--	--	--	--
12...	5.3	--	--	--	--	--	--	--
12...	5.3	--	--	--	--	--	--	--
12...	--	--	--	98	19	8	74	1200
12...	5.1	12.0	96	--	--	--	--	--
12...	5.4	--	--	--	--	--	--	--
12...	5.3	--	--	--	--	--	--	--
12...	5.3	--	--	--	--	--	--	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
MAR										
25...	1801	1010	262	7.3	.0	--	--	147	17	550
25...	1806	850	265	7.4	.0	--	--	147	18	690
25...	1811	690	258	7.3	.0	--	--	140	17	750
25...	1816	510	226	7.2	.0	--	--	126	14	920
25...	1821	355	210	7.3	.0	--	--	120	13	970
JUN										
18...	1436	450	164	7.5	12.6	9.6	79	--	--	--
18...	1437	650	160	7.5	12.7	9.8	81	--	--	--
18...	1438	775	148	7.6	12.5	9.8	81	--	--	--
18...	1439	875	140	7.4	12.5	9.8	81	--	--	--
18...	1440	1050	130	7.4	12.5	9.8	81	--	--	--
AUG										
11...	1731	1075	168	7.6	12.1	10.2	94	--	--	--
11...	1732	900	172	7.6	12.2	10.2	94	--	--	--
11...	1733	775	180	7.6	12.2	10.2	94	--	--	--
11...	1734	850	182	7.6	12.2	10.2	94	--	--	--
11...	1735	450	182	7.6	12.0	10.4	96	--	--	--

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 12...	1200	1100	42300	170	7.4	7.6	745	K7	K1	82	16
MAR 25...	1800	1200	11400	--	--	2.5	741	<1	<1	120	9
JUN 18...	1435	1240	90200	150	7.4	40	721	K7	K4	69	9
AUG 11...	1730	1230	82000	180	7.6	54	760	K11	K15	83	17

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 12...	25	4.6	2.1	.7	87	0	16	.6	.1	9.6
MAR 25...	35	7.7	2.5	.9	136	0	16	.4	.1	12
JUN 18...	20	4.6	1.8	.7	70	0	12	.3	.2	7.3
AUG 11...	24	5.5	1.9	.8	87	0	19	.5	.2	7.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)
OCT 12...	88	99	.11	.10	.010	.000	.35	.19	.36	.17
MAR 25...	143	142	.30	.25	.040	.060	.84	.17	.88	.65
JUN 18...	89	84	.14	.14	.040	.030	.74	.54	.78	.21
AUG 11...	110	100	.10	.09	.010	.010	.53	1.5	.54	.00

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 12...	.19	.47	.29	.030	.010	4.2	.3	36	4110	30
MAR 25...	.23	1.2	.48	.010	.010	4.9	.1	3	92	--
JUN 18...	.57	.92	.71	.090	.010	6.0	.5	144	35100	63
AUG 11...	1.5	.64	1.6	.130	.020	7.7	.3	160	35400	66

K NON-IDEAL COLONY COUNT

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT 12...	1200	3	2	1	300	100	200	0	0	0	10
MAR 25...	1800	2	0	2	300	200	70	0	0	<1	30
JUN 18...	1435	5	4	1	0	0	40	0	--	<1	0
AUG 11...	1730	6	4	2	100	60	40	4	1	3	20

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 12...	10	0	0	0	0	2	2	0	2000	1700	280
MAR 25...	20	10	1	0	<3	0	0	0	630	590	40
JUN 18...	0	0	0	--	<3	13	8	5	3900	3600	270
AUG 11...	20	0	6	--	<3	20	16	4	5800	5600	230

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)
OCT 12...	2	2	0	60	50	10	.2	.2	.0	2	1
MAR 25...	0	0	0	30	10	20	.0	.0	.0	0	0
JUN 18...	2	0	3	10	1	9	.1	.0	.2	4	3
AUG 11...	6	3	3	160	150	7	.1	.1	.0	11	9

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 12...	1	1	1	0	0	0	0	0	0	10
MAR 25...	1	1	1	0	0	0	0	10	7	<3
JUN 18...	1	0	0	0	2	2	0	30	--	<3
AUG 11...	2	0	0	0	0	0	0	50	40	7

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DIS- SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
OCT 12...	1200	<1.2	.5	<.8	.3	1.1	.5	1.0	.5	.05	.39
MAR 25...	1800	<2.1	<.4	<1.4	<.3	<.9	<.4	<.9	<.4	.05	.50
JUN 18...	1435	<1.2	5.3	<.8	3.6	.9	3.5	.9	3.4	.08	.39

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	OCT 12,79	MAR 25,80	JUN 18,80	AUG 11,80
TIME	1200	1800	1435	1730
TOTAL CELLS/ML	130	390	510	140
DIVERSITY: DIVISION	0.0	0.4	0.6	0.5
.CLASS	0.0	0.4	0.6	0.9
..ORDER	0.5	0.4	0.6	0.9
...FAMILY	0.5	0.4	1.5	2.0
....GENUS	0.5	0.4	1.5	2.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	13	3	--	-
....OOCYSTIS	--	-	--	-	--	-	14	10
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	--	-	26	5	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	26	7	13	3	--	-
....MELOSIRA	120#	90	--	-	--	-	--	-
..PENNALES								
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	42#	30
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	14	10
...FRAGILARIACEAE								
....SYNEDRA	--	-	--	-	--	-	55#	40
...NITZSCHIACEAE								
....NITZSCHIA	13	10	--	-	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	--	-	--	-	--	-	14	10
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	270#	54	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	360#	93	180#	36	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15304200 KISARALIK RIVER NEAR AKIAK

LOCATION.--Lat 60°21'12", long 159°54'56", in SE¼NW¼ sec.17, T.3 N., R.61 W., Hydrologic Unit 19040001, on left bank, 1.2 mi (1.9 km) upstream from Upper Falls, 4.2 mi (6.8 km) upstream from Quicksilver Creek, and 59.5 mi (95.7 km) southeast of Akiak.

DRAINAGE AREA.--270 mi^2 (700 km^2), approximately,

PERIOD OF RECORD.--October 1979 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (320 m), from topographic map.

REMARKS.--Records poor prior to May 22, good thereafter.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,710 ft^3/s (133 m^3/s) June 5, gage height, 8.95 ft (2.728 m); minimum daily, 220 ft^3/s (6.2 m^3/s) Mar. 2-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	1700	1300	380	260	230	240	520	2090	3460	2350	947
2	1900	1600	1200	370	260	220	240	540	2690	3850	2220	878
3	2300	1600	1200	360	260	220	250	560	3150	3720	2100	828
4	3000	1600	1100	350	260	220	250	580	4070	3490	1970	794
5	2800	2000	1100	340	260	220	260	620	4570	3740	1920	730
6	2700	2300	1000	330	260	220	260	640	4140	3990	1900	682
7	2600	2700	1000	320	260	220	270	680	3570	3790	1790	662
8	3000	2700	950	320	250	220	270	750	3200	3600	1670	626
9	3700	2500	950	310	250	220	270	680	3060	3310	1580	576
10	3600	2900	900	310	250	220	280	680	3350	3030	1570	542
11	3500	2700	850	310	250	220	280	720	3620	3230	1520	530
12	3300	2500	800	310	250	220	280	740	3550	3570	1450	612
13	3300	2300	750	300	250	220	280	780	3480	3760	1380	758
14	3200	2100	700	300	240	220	290	800	3550	3630	1300	806
15	3300	2500	650	300	240	220	290	900	3550	3380	1280	908
16	3000	2500	600	300	240	220	300	800	3550	3110	1250	953
17	3200	2300	580	290	240	220	310	830	3460	2930	1250	934
18	3000	2100	560	290	240	220	320	880	3240	2840	1520	866
19	2800	2000	540	290	230	220	330	920	3120	2860	1720	843
20	2700	1900	520	280	230	220	340	1000	3880	2990	1500	806
21	2500	1900	500	280	230	220	360	1100	3880	3060	1380	758
22	2400	1800	490	280	230	220	370	1300	3540	3090	1260	722
23	2300	1800	470	270	230	220	390	1200	3260	3200	1160	674
24	2100	1700	460	270	230	220	400	1300	3200	3030	1080	662
25	2000	1700	450	270	230	220	420	1570	3370	2900	1020	626
26	1900	1600	440	270	230	220	440	1860	3510	2840	966	1230
27	1800	1500	430	270	230	220	460	1900	3440	2880	947	1920
28	1700	1400	420	270	230	220	480	1860	3370	2790	934	2170
29	1900	1400	410	270	230	230	500	1990	3240	2570	878	2040
30	1900	1300	400	270	---	230	520	2100	3270	2380	843	1820
31	1800	---	390	270	---	230	---	2290	---	2350	856	---
TOTAL	80800	60600	22110	9350	7050	6860	9950	33090	102970	99370	44564	27903
MEAN	2606	2020	713	302	243	221	332	1067	3432	3205	1438	930
MAX	3700	2900	1300	380	260	230	520	2290	4570	3990	2350	2170
MIN	1600	1300	390	270	230	220	240	520	2090	2350	843	530
CFSM	9.65	7.48	2.64	1.12	.90	.82	1.23	3.95	12.7	11.9	5.33	3.44
IN.	11.13	8.35	3.05	1.29	.97	.95	1.37	4.56	14.19	13.69	6.14	3.84
AC-FT	160300	120200	43860	18550	13980	13610	19740	65630	204200	197100	88390	55350

WTR YR 1980 TOTAL 504617 MEAN 1379 MAX 4570 MIN 220 CFSM 5.11 IN 69.52 AC-FT 1001000

NOTE.--No gage-height record Oct. 1 to May 21.

15348000 FORTYMILE RIVER NEAR STEELE CREEK

LOCATION.--Lat 64°18'33", long 141°24'08", in SE¼NW¼ sec.16, T.7 S., R.32 E., Hydrologic Unit 19030001, on left bank 300 ft (91 m) downstream from bridge at mile 112.9 (181.7 km) on Taylor Highway, 0.3 mi (0.5 km) downstream from O'Brien Creek, 0.7 mi (1.1 km) southeast of Alaska Department of Highways road camp, and 4.4 mi (7.1 km) northwest of Steele Creek.

DRAINAGE AREA.--5,880 mi^2 (15,200 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1910 to October 1912, published as "at Steele Creek" (no winter records), October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,200.00 ft (365.760 m) National Geodetic Vertical Datum of 1929 (Alaska Department of Highways temporary bench mark). Prior to Oct. 16, 1912 at site 6.8 mi (10.9 km) downstream at different datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 8 to May 8, which are estimated and poor.

AVERAGE DISCHARGE.--5 years (water years 1976-80), 2,485 ft^3/s (70.38 m^3/s), 5.74 in/yr (146 mm/yr), 1,800,000 acre-ft/yr (2.22 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 72,000 ft^3/s (2,040 m^3/s) May 3, 1979, gage height, 92.4 ft (28.16 m), from floodmarks, from rating extended above 24,000 ft^3/s (680 m^3/s); no flow during winter period in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1964 reached a stage of 34.5 ft (10.52 m) from floodmarks, at previous Taylor Highway bridge and at different datum; discharge, 84,000 ft^3/s (2,380 m^3/s), from rating curve extended above 43,000 ft^3/s (1,220 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,200 ft^3/s (884 m^3/s) July 1, gage height, 83.06 ft (25.317 m), no flow Jan. 21 to Apr. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2780	310	110	40	.00	.00	.00	1000	3570	26500	3590	2580
2	2650	300	100	40	.00	.00	.00	2000	2720	14400	3310	2960
3	2520	290	100	40	.00	.00	.00	2500	2120	8740	2660	3200
4	2520	280	100	40	.00	.00	.00	3500	1930	5780	2290	2950
5	2320	270	100	40	.00	.00	.00	5400	2240	4730	2180	2790
6	2270	260	90	30	.00	.00	.00	8000	2190	3810	2080	2690
7	2060	250	90	30	.00	.00	.00	12000	1950	3080	1830	2610
8	1800	240	90	30	.00	.00	.00	19000	1640	3520	1710	2500
9	1500	230	90	30	.00	.00	.00	23000	1430	9990	1750	2440
10	1300	220	90	30	.00	.00	.00	24000	1220	8300	1730	2410
11	1100	220	80	20	.00	.00	.00	21000	1080	8030	1580	2720
12	960	210	80	20	.00	.00	.00	18000	1200	6100	1480	2780
13	880	210	80	20	.00	.00	.00	18000	3260	4730	1440	2570
14	800	200	80	20	.00	.00	.00	21000	5490	4070	3490	2850
15	720	190	80	20	.00	.00	.00	19000	8610	3560	8320	3720
16	680	180	70	10	.00	.00	.00	15000	7440	3070	6230	6380
17	640	180	70	10	.00	.00	.00	15000	6250	2730	6020	7580
18	600	170	70	10	.00	.00	.00	12000	10800	2370	8850	6740
19	560	170	70	10	.00	.00	.00	9200	9420	2170	7310	5760
20	520	160	70	10	.00	.00	.00	7100	7060	2400	6860	5100
21	500	160	60	.00	.00	.00	.00	8500	5340	2710	8610	4410
22	480	150	60	.00	.00	.00	.00	12000	4560	2410	7540	3970
23	460	150	60	.00	.00	.00	.00	10200	3890	2020	6210	3560
24	440	140	60	.00	.00	.00	.00	7980	3040	1730	5190	3240
25	410	140	60	.00	.00	.00	.00	6640	2410	1500	4490	3380
26	390	130	50	.00	.00	.00	.00	6290	1960	1370	3990	3180
27	380	130	50	.00	.00	.00	10	5760	1630	1340	3640	3130
28	360	120	50	.00	.00	.00	20	4890	1530	1440	3370	3400
29	340	120	50	.00	.00	.00	70	4360	5680	1680	3130	5100
30	330	110	50	.00	---	.00	300	4150	25000	2090	2900	4910
31	320	---	50	.00	---	.00	---	3830	---	2890	2720	---
TOTAL	33590	5890	2310	500.00	.00	.00	400.00	330300	136660	149260	126500	111610
MEAN	1084	196	74.5	16.1	.000	.000	13.3	10650	4555	4815	4081	3720
MAX	2780	310	110	40	.00	.00	300	24000	25000	26500	8850	7580
MIN	320	110	50	.00	.00	.00	.00	1000	1080	1340	1440	2410
CFSM	.18	.03	.01	.003	.000	.000	.002	1.81	.78	.82	.69	.63
IN.	.21	.04	.01	.00	.00	.00	.00	2.09	.86	.94	.80	.71
AC-FT	66630	11680	4580	992	.00	.00	793	655100	271100	296100	250900	221400

CAL YR 1979 TOTAL 1449225.00 MEAN 3970 MAX 61000 MIN .00 CFSM .68 IN 9.17 AC-FT 2875000
WTR YR 1980 TOTAL 897020.00 MEAN 2451 MAX 26500 MIN .00 CFSM .42 IN 5.68 AC-FT 1779000

15348000 FORTYMILE RIVER NEAR STEELE CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-57, 1959, 1976, and 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY						
22...	1830	12200	--	42	1360	58
JUL						
29...	1600	1750	15.0	6	28	62
SEP						
23...	1400	3540	--	8	76	56

15356000 YUKON RIVER AT EAGLE

LOCATION.--Lat 64°47'22", long 141°11'52", in NW¼ sec.31, T.1 S., R.33 E., Hydrologic Unit 19030002, on left bank at Eagle, 0.1 mi (0.2 km) upstream from Mission Creek, 1.1 mi (1.8 km) downstream from Castalia Creek, and 11 mi (18 km) downstream from the international boundary.

DRAINAGE AREA.--113,500 mi^2 (294,000 km^2), approximately.

PERIOD OF RECORD.--January 1911 to December 1913, June 1950 to current year. Monthly discharge only for some periods, published in WSP 1372.

REVISED RECORDS.--WSP 1372: 1911-14. WSP 2136: 1957, 1964 (M).

GAGE.--Nonrecording gage read once or twice daily. Altitude of gage is 850 ft (260 m), from topographic map. See WSP 1936 for history of changes prior to Oct. 1, 1963.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 14 to May 11, which are estimated and poor.

AVERAGE DISCHARGE.--32 years, 82,210 ft^3/s (2,328 m^3/s), 9.84 in/yr (250 mm/yr), 59,560,000 acre-ft/yr (73.4 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 545,000 ft^3/s (15,400 m^3/s) June 12, 1964, gage height, 33.85 ft (10.317 m); maximum gage height, 35.94 ft (10.955 m) in May 1962, from floodmarks, backwater from ice; minimum daily discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 241,000 ft^3/s (6,820 m^3/s) June 13, gage height, 20.5 ft (6.25 m); maximum gage height, 24.49 ft (7.465 m) about May 7, from floodmarks, backwater from ice; minimum daily discharge, 20,000 ft^3/s (566 m^3/s) Mar. 25 to Apr. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98800	50000	30000	24000	23000	22000	20000	50000	145000	175000	153000	127000
2	96400	50000	30000	24000	23000	22000	20000	56000	151000	173000	150000	124000
3	94000	49000	29000	24000	23000	22000	20000	66000	151000	159000	160000	123000
4	94000	48000	29000	24000	23000	21000	20000	90000	148000	150000	170000	121000
5	92800	47000	28000	24000	23000	21000	20000	110000	157000	145000	167000	119000
6	91600	46000	28000	24000	23000	21000	20000	120000	170000	143000	162000	118000
7	90400	45000	28000	24000	23000	21000	20000	130000	175000	141000	160000	115000
8	89200	44000	27000	24000	23000	21000	20000	130000	180000	144000	160000	114000
9	88000	43000	27000	23000	23000	21000	20000	120000	188000	150000	159000	112000
10	88000	42000	27000	23000	23000	21000	20000	120000	195000	154000	156000	111000
11	89200	42000	27000	23000	23000	21000	20000	110000	201000	151000	154000	111000
12	89200	41000	26000	23000	23000	21000	20000	110000	217000	148000	151000	112000
13	88000	40000	26000	23000	22000	21000	21000	106000	237000	144000	148000	112000
14	86000	40000	26000	23000	22000	21000	21000	112000	233000	143000	151000	112000
15	84000	39000	26000	23000	22000	21000	21000	124000	217000	144000	162000	115000
16	80000	38000	26000	23000	22000	21000	22000	131000	205000	145000	167000	123000
17	78000	38000	26000	23000	22000	21000	22000	137000	196000	150000	160000	139000
18	76000	37000	26000	23000	22000	21000	23000	147000	193000	154000	156000	151000
19	74000	36000	25000	23000	22000	21000	24000	157000	193000	173000	154000	164000
20	72000	36000	25000	23000	22000	21000	25000	165000	181000	200000	153000	160000
21	70000	35000	25000	23000	22000	21000	26000	159000	173000	208000	153000	151000
22	68000	35000	25000	23000	22000	21000	27000	157000	165000	201000	150000	143000
23	66000	34000	25000	23000	22000	21000	28000	156000	157000	190000	147000	136000
24	64000	34000	25000	23000	22000	21000	30000	147000	151000	180000	145000	132000
25	62000	33000	25000	23000	22000	20000	31000	136000	145000	173000	143000	128000
26	60000	33000	25000	23000	22000	20000	33000	129000	137000	168000	140000	123000
27	58000	32000	25000	23000	22000	20000	35000	127000	135000	164000	137000	119000
28	56000	32000	25000	23000	22000	20000	38000	128000	133000	159000	135000	116000
29	54000	31000	24000	23000	22000	20000	40000	131000	135000	157000	133000	114000
30	52000	31000	24000	23000	---	20000	44000	135000	148000	154000	132000	115000
31	52000	---	24000	23000	---	20000	---	140000	---	154000	129000	---
TOTAL	2401600	1181000	814000	721000	650000	647000	751000	3836000	5212000	4994000	4697000	3760000
MEAN	77470	39370	26260	23260	22410	20870	25030	123700	173700	161100	151500	125300
MAX	98800	50000	30000	24000	23000	22000	44000	165000	237000	208000	170000	164000
MIN	52000	31000	24000	23000	22000	20000	20000	50000	133000	141000	129000	111000
CFSM	.68	.35	.23	.21	.20	.18	.22	1.09	1.53	1.42	1.34	1.10
IN.	.79	.39	.27	.24	.21	.21	.25	1.26	1.71	1.64	1.54	1.23
AC-FT	4764000	2343000	1615000	1430000	1289000	1283000	1490000	7609000	10340000	9906000	9316000	7458000

CAL YR 1979 TOTAL 37389400 MEAN 102400 MAX 291000 MIN 20000 CFSM .90 IN 12.25 AC-FT 74160000
WTR YR 1980 TOTAL 29664600 MEAN 81050 MAX 237000 MIN 20000 CFSM .71 IN 9.72 AC-FT 58840000

15388950 PORCUPINE RIVER AT OLD CROW

LOCATIONS.--Lat 67°33'50", long 139°53'00", Yukon Territory, Canada, on right bank 1.25 mi (2.01 km) downstream from Old Crow and 3.0 mile (4.8 km) downstream from the Old Crow River.

DRAINAGE AREA.--21,400 mi² (55,400 km²), approximately.

PERIOD OF RECORD.--June 1961 to current year (no winter records in water years 1962-68).

GAGE.--Water-stage recorder. Altitude of gage is 1,000 ft (305 m) from topographic map. Prior to July 1972 non-recording gage 1.25 mi (2.01 km) upstream at different datum.

REMARKS.--Differences between figures published herein and corresponding figures in reports of the Water Survey of Canada are due to variations in automated program techniques. After December 1978 figures published in reports of the Water Survey of Canada are in the metric system and have been converted to the English system for this report.

COOPERATION.--Discharge records furnished by the Water Survey of Canada.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 237,000 cfs (6,710 m³/s) June 4, 1964; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 231,000 ft³/s (6,530 m³/s) May 21; minimum daily, 569 ft³/s (16.1 m³/s) Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13500	4380	2480	1270	720	600	682	795	61100	8690	27700	47000
2	12500	4310	2380	1150	731	586	671	816	58300	7520	29100	39900
3	11400	4200	2270	1090	756	590	622	840	59300	6890	31800	33800
4	10800	4060	2200	1070	791	593	590	865	64300	6360	35000	28800
5	10200	3880	2150	1080	826	611	579	901	63600	5970	39200	25700
6	9360	3780	2070	1090	865	639	590	939	62500	5860	44100	23900
7	8620	3740	2000	1120	876	682	607	975	62900	6360	37100	21800
8	8230	3710	1890	1120	840	682	639	1020	62900	8370	31600	20100
9	8160	3670	1860	1040	784	636	667	1090	57200	10700	27200	18500
10	8260	3640	1800	1030	759	671	682	1170	45900	10900	23300	17400
11	8300	3600	1760	1060	766	696	660	1270	37100	9570	19500	16300
12	8440	3510	1710	1040	784	671	650	1410	31400	10500	17300	15300
13	8620	3300	1670	982	780	639	671	1800	25200	11400	16000	14600
14	9040	3180	1590	890	759	604	664	2370	21200	12700	14900	14000
15	10200	3120	1580	879	710	590	660	3710	17600	11800	14000	13700
16	10900	3090	1570	890	671	579	685	10600	22200	11000	14200	14100
17	10900	3040	1570	901	636	569	646	23000	27500	11400	18800	16000
18	10500	2930	1580	922	614	572	629	45900	27300	11600	28900	17100
19	9710	2740	1580	950	607	579	653	97100	23500	10300	35700	20700
20	8900	2680	1580	989	611	600	699	177000	21900	9250	35100	27100
21	7910	2630	1560	1010	629	629	696	231000	24200	8580	34100	28000
22	6710	2600	1530	1020	639	646	689	148000	26300	7840	35700	26700
23	5510	2590	1480	982	653	650	689	60400	22400	7240	36700	23700
24	5190	2590	1430	840	671	646	696	63200	18900	6740	47000	19800
25	5010	2580	1420	844	685	622	706	64600	16600	6290	48000	16500
26	4910	2570	1410	862	682	607	717	74500	14500	5900	39600	13500
27	4730	2570	1410	869	671	604	731	94600	12900	5470	32500	12500
28	4660	2560	1400	851	650	643	742	98200	11500	5120	27600	11400
29	4560	2520	1400	791	629	629	759	103000	10600	11300	26400	11100
30	4450	2490	1400	731	---	607	780	87900	9640	21200	31700	10700
31	4410	---	1400	713	---	660	---	69900	---	34300	48400	---
TOTAL	254590	96260	53130	30076	20795	19332	20151	1468871	1020440	307120	948200	619700
MEAN	8213	3209	1714	970	717	624	672	47380	34010	9907	30590	20660
MAX	13500	4380	2480	1270	876	696	780	231000	64300	34300	48400	47000
MIN	4410	2490	1400	713	607	569	579	795	9640	5120	14000	10700
CFSM	.38	.15	.08	.05	.03	.03	.03	2.21	1.59	.46	1.43	.97
IN.	.44	.17	.09	.05	.04	.03	.04	2.55	1.77	.53	1.65	1.08
AC-FT	505000	190900	105400	59660	41250	38350	39970	2914000	2024000	609200	1881000	1229000

WTR YR 1980 TOTAL 4858665 MEAN 13280 MAX 231000 MIN 569 CFSM .62 IN 8.45 AC-FT 9637000

15439800 BOULDER CREEK NEAR CENTRAL

LOCATION.--Lat 65°34'05", long 144°53'13", in NW¼ sec.32, T.9 N., R.14 E., Hydrologic Unit 19030002, on right bank, 2,000 ft (610 m) upstream from bridge at mile 125.4 (201.8 km) on Steese Highway, 0.7 mi (1.1 km) upstream from mouth, and 2.3 mi (3.7 km) west of Central.

DRAINAGE AREA.--31.3 mi² (81.1 km²).

PERIOD OF RECORD.--Annual maximums, water years 1964-66. May 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,075 ft (328 m), from topographic map. Aug. 3, 1963 to May 22, 1966, crest-stage gage at upstream side of bridge 2,000 ft (610 m) downstream at different datum. May 23, 1966 to Sept. 27, 1969, water-stage recorder, on downstream side of bridge, at datum 7.02 ft (2.140 m) higher than previous datum. Sept. 28, 1969 to July 31, 1971, nonrecording gage on downstream side of bridge, datum of prior recording gage.

REMARKS.--Records fair except those for Oct. 4 to May 22, which are estimated and poor.

AVERAGE DISCHARGE.--14 years, 11.6 ft³/s (0.329 m³/s), 5.03 in/yr (128 mm/yr), 8,400 acre-ft/yr (10.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,150 ft³/s (32.6 m³/s) Aug. 13, 1967, gage height, 7.50 ft (2.286 m), site and datum then in use, 9.72 ft (2.963 m), from floodmarks at present site and datum, from rating curve extended above 70 ft³/s (2.0 m³/s) on the basis of slope-area measurement of peak flow; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 364 ft³/s (10.3 m³/s) June 30, gage height, 7.77 ft (2.368 m); no flow Oct. 31 to Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	.00	.00	.00	.00	.00	.00	9.0	22	128	16	12
2	11	.00	.00	.00	.00	.00	.00	15	13	55	13	11
3	12	.00	.00	.00	.00	.00	.00	24	10	30	10	9.5
4	25	.00	.00	.00	.00	.00	.00	50	12	18	14	10
5	16	.00	.00	.00	.00	.00	.00	90	12	13	13	9.8
6	11	.00	.00	.00	.00	.00	.00	110	10	9.8	10	9.2
7	8.7	.00	.00	.00	.00	.00	.00	120	8.9	9.2	9.2	8.6
8	7.0	.00	.00	.00	.00	.00	.00	120	6.6	32	26	7.8
9	5.8	.00	.00	.00	.00	.00	.00	115	5.2	80	36	8.0
10	5.0	.00	.00	.00	.00	.00	.00	105	4.4	68	24	7.5
11	4.2	.00	.00	.00	.00	.00	.00	94	3.3	42	15	7.5
12	3.7	.00	.00	.00	.00	.00	.00	88	3.1	28	12	7.5
13	3.2	.00	.00	.00	.00	.00	.00	85	12	22	11	7.8
14	2.8	.00	.00	.00	.00	.00	.00	82	28	15	20	7.8
15	2.5	.00	.00	.00	.00	.00	.00	80	24	11	19	8.6
16	2.3	.00	.00	.00	.00	.00	.00	77	22	10	14	10
17	2.1	.00	.00	.00	.00	.00	.00	75	37	9.2	14	10
18	1.9	.00	.00	.00	.00	.00	.00	73	28	7.5	18	9.8
19	1.7	.00	.00	.00	.00	.00	.00	70	18	6.1	28	9.5
20	1.6	.00	.00	.00	.00	.00	.00	68	36	5.2	39	9.0
21	1.5	.00	.00	.00	.00	.00	1.0	66	25	4.4	32	8.0
22	1.4	.00	.00	.00	.00	.00	1.2	63	15	3.6	26	7.0
23	1.3	.00	.00	.00	.00	.00	1.4	61	10	3.5	20	6.0
24	1.2	.00	.00	.00	.00	.00	1.6	57	7.5	3.3	16	5.4
25	1.1	.00	.00	.00	.00	.00	1.8	53	6.0	3.2	15	5.0
26	1.0	.00	.00	.00	.00	.00	2.2	49	5.0	3.2	14	4.7
27	.80	.00	.00	.00	.00	.00	2.8	42	223	3.0	13	4.4
28	.60	.00	.00	.00	.00	.00	3.5	34	109	2.8	13	4.2
29	.40	.00	.00	.00	.00	.00	4.5	26	63	3.0	13	4.1
30	.20	.00	.00	.00	---	.00	6.0	16	206	4.4	13	4.0
31	.00	---	.00	.00	---	.00	---	28	---	7.0	12	---
TOTAL	150.00	.00	.00	.00	.00	.00	26.00	2045.0	985.0	640.4	548.2	233.7
MEAN	4.84	.000	.000	.000	.000	.000	.87	66.0	32.8	20.7	17.7	7.79
MAX	25	.00	.00	.00	.00	.00	6.0	120	223	128	39	12
MIN	.00	.00	.00	.00	.00	.00	.00	9.0	3.1	2.8	9.2	4.0
CFSM	.16	.000	.000	.000	.000	.000	.03	2.11	1.05	.66	.57	.25
IN.	.18	.00	.00	.00	.00	.00	.03	2.43	1.17	.76	.65	.28
AC-FT	298	.00	.00	.00	.00	.00	52	4060	1950	1270	1090	464

CAL YR 1979 TOTAL 4725.40 MEAN 12.9 MAX 120 MIN .00 CFSM .41 IN 5.62 AC-FT 9370
WTR YR 1980 TOTAL 4628.30 MEAN 12.6 MAX 223 MIN .00 CFSM .40 IN 5.50 AC-FT 9180

NOTE.--No gage-height record Oct. 4 to May 12.

15453500 YUKON RIVER NEAR STEVENS VILLAGE

LOCATION.--Lat 65°52'32", long 149°43'04", in SE¼SW¼ sec.7, T.12 N., R.10 W., Hydrologic Unit 19030002, on pier no. 5 of the Yukon River bridge, 730 ft (222 m) from north abutment, on TAPS haul road, 0.5 mi (0.8 km) downstream from Woodcamp Creek, 2.5 mi (4.0 km) upstream from Ray River, and 21 mi (34 km) southwest of Stevens Village.

DRAINAGE AREA.--196,300 mi^2 (508,400 km^2), approximately.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 240.00 ft (73.152 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for Oct. 22 to May 12, which are estimated and poor. NOAA satellite telemetry at station. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 670,000 ft^3/s (19,000 m^3/s) about June 9, 1977, gage height, 54.49 ft (16.609 m), from floodmarks; minimum daily, 18,000 ft^3/s (510 m^3/s) Apr. 1-25, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed downstream at Rampart (station no. 15468000), 950,000 ft^3/s (26,900 m^3/s) June 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 407,000 ft^3/s (11,500 m^3/s) May 24, gage height, 44.00 ft (13.611 m), minimum daily, 22,000 ft^3/s (623 m^3/s) Mar. 26 to Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134000	70000	38000	30000	27000	24000	22000	34000	356000	210000	184000	212000
2	131000	68000	38000	30000	27000	24000	22000	36000	355000	205000	191000	204000
3	128000	66000	38000	30000	27000	24000	22000	40000	347000	206000	203000	200000
4	126000	64000	38000	30000	27000	24000	22000	44000	332000	216000	218000	202000
5	123000	62000	36000	30000	27000	24000	22000	50000	312000	230000	230000	209000
6	121000	60000	36000	29000	26000	24000	22000	56000	295000	230000	236000	212000
7	118000	58000	36000	29000	26000	24000	22000	68000	283000	219000	243000	206000
8	115000	58000	36000	29000	26000	24000	22000	80000	284000	206000	251000	198000
9	113000	56000	34000	29000	26000	24000	22000	100000	298000	197000	253000	189000
10	111000	56000	34000	29000	26000	24000	22000	120000	309000	190000	251000	181000
11	110000	54000	34000	29000	26000	24000	22000	150000	311000	191000	246000	174000
12	107000	54000	34000	29000	26000	24000	22000	180000	307000	205000	243000	167000
13	106000	52000	34000	29000	26000	24000	22000	279000	297000	211000	242000	162000
14	105000	52000	34000	29000	26000	24000	22000	277000	285000	211000	238000	157000
15	105000	50000	34000	29000	26000	24000	22000	270000	282000	208000	230000	155000
16	106000	50000	32000	28000	26000	23000	22000	273000	304000	203000	221000	153000
17	107000	48000	32000	28000	26000	23000	22000	243000	325000	196000	214000	152000
18	106000	48000	32000	28000	25000	23000	22000	222000	323000	190000	217000	152000
19	103000	46000	32000	28000	25000	23000	22000	227000	312000	189000	226000	156000
20	100000	46000	32000	28000	25000	23000	22000	239000	298000	193000	238000	164000
21	98200	46000	32000	28000	25000	23000	23000	255000	289000	193000	251000	177000
22	96000	44000	32000	28000	25000	23000	23000	299000	287000	193000	262000	190000
23	94000	44000	32000	28000	25000	23000	24000	363000	294000	200000	272000	202000
24	92000	42000	32000	28000	25000	23000	24000	399000	298000	214000	278000	206000
25	88000	42000	32000	28000	25000	23000	25000	406000	297000	222000	274000	203000
26	84000	42000	30000	27000	25000	22000	26000	387000	289000	220000	262000	195000
27	80000	40000	30000	27000	25000	22000	27000	377000	273000	212000	250000	186000
28	78000	40000	30000	27000	25000	22000	28000	332000	254000	203000	241000	177000
29	76000	40000	30000	27000	25000	22000	30000	327000	237000	195000	238000	168000
30	74000	38000	30000	27000	---	22000	32000	337000	223000	188000	233000	159000
31	72000	---	30000	27000	---	22000	---	350000	---	184000	223000	---
TOTAL	3207200	1536000	1034000	882000	747000	722000	702000	6820000	8956000	6330000	7359000	5468000
MEAN	103500	51200	33350	28450	25760	23290	23400	220000	298500	204200	237400	182300
MAX	134000	70000	38000	30000	27000	24000	32000	406000	356000	230000	278000	212000
MIN	72000	38000	30000	27000	25000	22000	22000	34000	223000	184000	184000	152000
CFSM	.53	.26	.17	.15	.13	.12	.12	1.12	1.52	1.04	1.21	.93
IN.	.61	.29	.20	.17	.14	.14	.13	1.29	1.70	1.20	1.39	1.04
AC-FT	6361000	3047000	2051000	1749000	1482000	1432000	1392000	13530000	17760000	12560000	14600000	10850000

CAL YR 1979 TOTAL 45004200 MEAN 123300 MAX 450000 MIN 22000 CFSM .63 IN 8.53 AC-FT 89270000
WTR YR 1980 TOTAL 43763200 MEAN 119600 MAX 406000 MIN 22000 CFSM .61 IN 8.29 AC-FT 86800000

NOTE.--No gage-height record Nov. 8 to May 6.

15476000 TANANA RIVER NEAR TANACROSS

LOCATION.--Lat 63°23'18", long 143°44'47", in NE¼ sec.31, T.19 N., R.9 E., Hydrologic Unit 19030004, on right bank 0.2 mi (0.3 km) north of Cathedral Rapids, 0.3 mi (0.5 km) downstream from Cathedral Rapids Creek No. 1, 9 mi (14 km) upstream from Robertson River, and 13 mi (21 km) west of Tanacross.

DRAINAGE AREA.--8,550 mi^2 (22,140 km^2), approximately.

PERIOD OF RECORD.--June 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.58 ft (454.024 m) National Geodetic Vertical Datum of 1929. Prior to June 13, 1959, on left bank at site 120 ft (37 m) upstream at same datum.

REMARKS.--Records good except those for period of no gage-height record, Oct. 15 to May 20, which are estimated and poor. Several observations of water temperature were made during the year. Satellite telemetry at station.

AVERAGE DISCHARGE.--27 years, 7,954 ft^3/s (225.3 m^3/s), 12.63 in/yr (321 mm/yr), 5,763,000 acre-ft/yr (7.11 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,100 ft^3/s (1,110 m^3/s) June 19, 1962, gage height, 11.65 ft (3.551 m); maximum gage height, 11.70 ft (3.566 m) July 22, 1975; minimum daily discharge, 1,400 ft^3/s (40 m^3/s) Mar. 1-31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,300 ft^3/s (773 m^3/s) July 26, gage height, 9.66 ft (2.944 m); minimum daily, 2,200 ft^3/s (62.3 m^3/s) Feb. 1 to Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7810	4000	2800	2400	2200	2200	2400	5400	6900	14300	20500	10000
2	7210	4000	2800	2400	2200	2200	2400	6000	6920	16100	19400	9850
3	7000	4000	2800	2400	2200	2200	2400	6400	6920	15600	19500	9790
4	6820	4000	2800	2400	2200	2200	2400	6800	6680	15000	19800	9700
5	6680	4000	2800	2400	2200	2200	2400	7000	7080	14000	19100	9550
6	6550	3600	2800	2400	2200	2200	2800	7200	7660	13200	18700	9070
7	6420	3600	2800	2400	2200	2200	2800	7400	9610	13400	18900	8440
8	6320	3600	2800	2400	2200	2200	2800	7400	11800	14700	20300	7960
9	6200	3600	2800	2400	2200	2200	2800	7600	13600	16100	22100	7540
10	6080	3600	2800	2400	2200	2200	2800	7600	14700	17100	22700	7300
11	6000	3600	2800	2400	2200	2200	2800	7400	15000	17500	20500	7000
12	6000	3600	2800	2400	2200	2200	2800	7400	14700	17500	19700	6820
13	5980	3600	2800	2400	2200	2200	2800	7200	15000	17900	20600	6650
14	5880	3600	2800	2400	2200	2200	2800	7200	14900	18900	22400	6520
15	5800	3600	2800	2400	2200	2200	2800	7200	13900	19900	24900	6580
16	5600	3200	2600	2400	2200	2200	3000	7000	13300	20500	24900	6900
17	5400	3200	2600	2400	2200	2200	3000	7000	12900	21700	21200	8650
18	5200	3200	2600	2400	2200	2200	3000	7000	12100	24700	18700	11800
19	5000	3200	2600	2400	2200	2200	3200	6800	12100	26000	17300	16200
20	4800	3200	2600	2400	2200	2200	3200	6800	13400	25600	16700	17300
21	4600	3200	2600	2400	2200	2400	3200	6550	12100	25000	16200	16300
22	4400	3200	2600	2400	2200	2400	3400	6000	10100	24400	15200	14900
23	4300	3200	2600	2400	2200	2400	3400	5590	9400	24500	14300	13800
24	4100	3200	2600	2400	2200	2400	3600	5300	8650	25100	13800	12900
25	4000	3200	2600	2400	2200	2400	3800	5160	8380	26200	13800	12300
26	4000	3200	2600	2400	2200	2400	4000	5160	8560	26600	12600	12000
27	4000	3200	2600	2400	2200	2400	4200	5350	9340	25300	11800	11600
28	4000	3200	2600	2400	2200	2400	4400	5710	10300	26000	11100	11400
29	4000	3200	2600	2400	2200	2400	4600	6200	11200	26800	10800	11300
30	4000	3200	2600	2400	---	2400	5000	6700	12900	25800	10500	11200
31	4000	---	2600	2400	---	2400	---	6820	---	23000	10300	---
TOTAL	168150	104000	83600	74400	63800	70400	95000	204340	330100	638400	548300	311320
MEAN	5424	3467	2697	2400	2200	2271	3167	6592	11000	20590	17690	10380
MAX	7810	4000	2800	2400	2200	2400	5000	7600	15000	26800	24900	17300
MIN	4000	3200	2600	2400	2200	2200	2400	5160	6680	13200	10300	6520
CFSM	.63	.41	.32	.28	.26	.27	.37	.77	1.29	2.41	2.07	1.21
IN.	.73	.45	.36	.32	.28	.31	.41	.89	1.44	2.78	2.39	1.35
AC-FT	333500	206300	165800	147600	126500	139600	188400	405300	654800	1266000	1088000	617500

CAL YR 1979 TOTAL 3442880 MEAN 9433 MAX 35300 MIN 2600 CFSM 1.10 IN 14.98 AC-FT 6829000
WTR YR 1980 TOTAL 2691810 MEAN 7355 MAX 26800 MIN 2200 CFSM .86 IN 11.71 AC-FT 5339000

15476300 BERRY CREEK NEAR DOT LAKE

LOCATION.--Lat 63°41'23", long 144°21'47", in NW¼ sec.13, T.22 N., R.5 E., Hydrologic Unit 19030004, on left bank 100 ft (30 m) upstream from bridge at mile 1,371.4 (2,206.6 km) on Alaska Highway, 1.9 mi (3.1 km) upstream from mouth, and 6.0 mi (9.7 km) west of Dot Lake.

DRAINAGE AREA.--65.1 mi² (168.6 km²).

PERIOD OF RECORD.--Annual maximum, water years 1964-71; July 1971 to current year.

REVISED RECORDS.--WSP 2136: 1964-65 (M).

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (430 m), from topographic map. Aug. 14, 1963 to July 27, 1971, crest-stage gage at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 18 to May 23, which are estimated and poor.

AVERAGE DISCHARGE.--9 years, 42.8 ft³/s (1.212 m³/s), 8.93 in/yr (227 mm/yr), 31,010 acre-ft/yr (38.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,800 ft³/s (79.3 m³/s) July 19, 1964, gage height, 15.25 ft (4.648 m) site then in use, 15.49 ft (4.721 m) present site, from rating curve extended above 580 ft³/s (16 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 17.5 ft (5.33 m) in May 1976, from floodmarks, flow over ice; minimum daily discharge, 0.6 ft³/s (0.02 m³/s) Jan. 21 to Mar. 15, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 490 ft³/s (13.9 m³/s) June 17, gage height, 11.98 ft (3.652 m); minimum daily, 6.5 ft³/s (0.18 m³/s) Jan. 16 to Feb. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	16	9.0	7.0	6.5	7.0	13	25	28	138	76	36
2	33	15	9.0	7.0	6.5	7.0	14	26	26	83	70	36
3	33	15	9.0	7.0	6.5	7.0	13	27	28	72	45	36
4	31	14	9.0	7.0	6.5	7.0	12	27	43	68	47	35
5	33	14	9.0	7.0	6.5	7.0	12	28	65	67	47	35
6	31	13	9.0	7.0	6.5	7.0	12	28	74	65	45	35
7	30	13	9.0	7.0	6.5	7.0	12	29	50	58	47	35
8	31	12	9.0	7.0	6.5	7.0	12	29	34	50	47	35
9	32	12	9.0	7.0	6.5	7.0	13	30	28	49	46	35
10	31	11	9.0	7.0	6.5	7.0	13	31	30	55	46	35
11	30	11	9.0	7.0	6.5	7.0	13	32	30	49	46	34
12	28	10	9.0	7.0	6.5	7.0	14	33	28	52	45	34
13	27	10	9.0	7.0	6.5	7.0	14	33	26	47	46	34
14	27	10	9.0	7.0	6.5	7.0	14	34	28	46	53	34
15	26	10	9.0	7.0	6.5	8.0	15	34	28	46	50	63
16	26	10	8.0	6.5	6.5	8.0	15	34	32	100	43	87
17	25	10	8.0	6.5	6.5	8.0	15	34	145	185	67	60
18	24	10	8.0	6.5	6.5	8.0	16	33	172	134	57	55
19	24	10	8.0	6.5	6.5	8.0	16	32	76	92	49	63
20	23	10	8.0	6.5	6.5	8.0	16	32	49	79	55	76
21	22	10	8.0	6.5	6.5	8.0	17	32	37	72	52	67
22	21	10	8.0	6.5	6.5	8.0	17	32	33	60	46	60
23	21	10	8.0	6.5	6.5	8.0	17	32	34	58	42	55
24	20	10	8.0	6.5	6.5	8.0	18	32	34	55	40	47
25	20	10	8.0	6.5	6.5	9.0	19	34	34	55	37	45
26	19	10	8.0	6.5	6.5	9.0	20	35	34	100	36	42
27	18	10	8.0	6.5	6.5	10	21	39	46	74	36	42
28	18	10	8.0	6.5	6.5	10	22	41	43	60	35	67
29	17	10	8.0	6.5	6.5	11	23	43	55	52	35	72
30	17	10	8.0	6.5	---	11	24	36	140	52	35	60
31	16	---	8.0	6.5	---	12	---	32	---	67	35	---
TOTAL	787	336	263.0	209.0	188.5	250.0	472	999	1510	2240	1456	1450
MEAN	25.4	11.2	8.48	6.74	6.50	8.06	15.7	32.2	50.3	72.3	47.0	48.3
MAX	33	16	9.0	7.0	6.5	12	24	43	172	185	76	87
MIN	16	10	8.0	6.5	6.5	7.0	12	25	26	46	35	34
CFSM	.39	.17	.13	.10	.10	.12	.24	.50	.77	1.11	.72	.74
IN.	.45	.19	.15	.12	.11	.14	.27	.57	.86	1.28	.83	.83
AC-FT	1560	666	522	415	374	496	936	1980	3000	4440	2890	2880

CAL YR 1979 TOTAL 13068.0 MEAN 35.8 MAX 274 MIN 6.0 CFSM .55 IN 7.47 AC-FT 25920
WTR YR 1980 TOTAL 10160.5 MEAN 27.8 MAX 185 MIN 6.5 CFSM .43 IN 5.81 AC-FT 20150

15481000 TANANA RIVER NEAR HARDING LAKE

LOCATION.--Lat 64°24'04", long 146°56'56", in NE¼ sec.16, T.6 S., R.4 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 2 mi (3 km) southwest of Harding Lake, 6 mi (10 km) upstream from Salcha River, and 38 mi (61 km) southeast of Fairbanks.

DRAINAGE AREA.--17,240 mi² (44,650 km²).

PERIOD OF RECORD.--May 1968 to current year (gage heights only).

REVISED RECORDS.--WRD Alaska 1972: 1971.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m), from topographic map.

REMARKS.--Records poor. NOAA satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 16.74 ft (5.102 m) July 15, 1971, but may have been higher during period of no gage-height record, July 16-18, 1971; minimum gage height not determined.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1967 reached a gage height of 18.1 ft (5.52 m) from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 15.15 ft (4.618 m) July 29; minimum gage height not determined.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.49								---	13.24	13.79	10.72
2	9.37								---	13.47	13.39	10.61
3	9.34								---	13.46	13.04	10.41
4	9.21								10.23	13.42	12.89	10.23
5	9.11								10.62	13.21	12.86	10.09
6	9.07								11.32	13.13	12.81	9.98
7	9.02								12.10	13.27	12.99	9.87
8	8.93								12.44	13.28	13.30	9.74
9	8.91								12.13	13.25	13.73	9.62
10	9.11								11.67	13.25	13.71	9.57
11	9.14								11.69	13.31	13.81	9.67
12	9.07								12.04	13.59	13.88	9.74
13	8.80								11.95	13.79	13.76	9.75
14	8.64								11.90	13.82	13.90	9.65
15	8.54								11.96	13.75	13.76	9.72
16	8.44								11.82	13.71	13.68	10.16
17	8.41								11.98	14.06	13.65	10.72
18	8.32								13.30	14.35	13.42	10.71
19	8.16								13.35	14.11	13.30	10.67
20	8.13								12.47	14.13	12.96	11.05
21	7.96								11.85	14.43	12.66	11.44
22	7.79								11.61	14.42	12.45	11.44
23	7.83								11.26	14.30	12.15	11.25
24	7.70								11.07	14.22	11.79	11.00
25	7.67								11.05	14.28	11.50	10.77
26	7.71								11.13	14.40	11.37	10.59
27	7.58								11.36	14.46	11.21	10.45
28	7.51								11.80	14.84	11.07	10.49
29	7.38								12.14	14.99	10.96	10.48
30	7.51								12.73	14.48	10.83	10.44
31	7.55								---	14.19	10.74	---
MEAN	8.43								---	13.89	12.75	10.37
MAX	9.49								---	14.99	13.90	11.44
MIN	7.38								---	13.13	10.74	9.57

15484000 SALCHA RIVER NEAR SALCHAKET

LOCATION.--Lat 64°28'22", long 146°55'26", in NE¼ sec.22, T.5 S., R.4 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 0.2 mi (0.3 km) upstream from bridge on Richardson Highway, 0.5 mi (0.8 km) east of Sno-Shu Inn, 2 mi (3 km) upstream from mouth, and 6 mi (10 km) southeast of Salchaket.

DRAINAGE AREA.--2,170 mi^2 (5,620 km^2), approximately.

PERIOD OF RECORD.--July 1909 to August 1910, published as "at mouth" (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.85 ft (192.588 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 10, 1910, nonrecording gage at site 1.5 mi (2.4 km) downstream at different datum. Oct. 1, 1948 to Apr. 24, 1953, nonrecording gage, and Apr. 25, 1953 to Oct. 16, 1967, water-stage recorder at site 800 ft (240 m) downstream at same datum.

REMARKS.--Records good except those for Oct. 18 to May 5, which are estimated and poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--32 years (water years 1949-80), 1,650 ft^3/s (46.73 m^3/s), 10.33 in/yr (262 mm/yr), 1,195,000 acre-ft/yr (1.47 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 97,000 ft^3/s (2,750 m^3/s) Aug. 14, 1967, gage height, 21.78 ft (6.639 m), present site, from floodmarks, from rating curve extended above 16,000 ft^3/s (450 m^3/s) on basis of slope-area measurement and slope-conveyance determination of peak flow; minimum not determined, monthly mean of 60 ft^3/s (1.7 m^3/s) published for March 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,400 ft^3/s (294 m^3/s) July 2, gage height, 11.63 ft (3.545 m), only peak above base of 10,000 ft^3/s (280 m^3/s); minimum daily, 180 ft^3/s (5.10 m^3/s) Feb. 16 to Mar. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	560	500	300	200	180	200	780	1440	8300	1990	3430
2	1320	560	500	300	200	180	220	894	1710	7860	2030	3430
3	1290	540	500	300	200	180	220	1040	1360	4390	1800	3470
4	1270	540	500	300	200	180	240	1290	1160	3030	1690	3200
5	1260	540	500	300	200	180	240	1570	1130	2320	2630	2950
6	1240	540	500	280	200	180	240	2030	1170	1870	3170	2770
7	1210	540	500	280	200	180	260	2370	1140	1590	2640	2600
8	1180	540	480	280	190	180	260	2420	1050	1430	2370	2440
9	1150	540	480	280	190	180	280	2410	974	1950	2650	2310
10	1160	540	480	280	190	180	280	2270	904	3780	2670	2210
11	1150	540	480	260	190	180	300	2270	841	3450	2290	2150
12	1130	520	460	260	190	180	300	2080	785	2920	2020	2100
13	1110	520	460	260	190	180	320	1740	750	2280	1830	2030
14	1100	520	440	260	190	180	320	1670	722	1920	1760	1980
15	1070	520	440	260	190	180	340	1970	694	1690	2660	1980
16	1000	520	420	260	180	180	340	1940	792	1570	3940	2210
17	932	520	420	260	180	180	360	1790	911	1540	3940	2750
18	920	520	400	240	180	180	360	1980	1440	1490	6350	2860
19	880	520	400	240	180	180	380	1750	4170	1380	6070	2790
20	840	520	380	240	180	180	380	1510	3610	1280	5390	3080
21	800	500	380	240	180	180	400	1370	2840	1210	5600	3670
22	760	500	360	240	180	180	400	1260	2120	1150	5470	3230
23	720	500	360	240	180	180	420	1330	1630	1100	4950	2780
24	680	500	360	220	180	180	460	1450	1400	1050	4320	2510
25	640	500	340	220	180	180	500	1340	1220	1020	3820	2390
26	620	500	340	220	180	190	540	1320	1090	1010	3460	2280
27	600	500	340	220	180	190	580	1390	1000	1110	3350	2160
28	600	500	320	220	180	190	620	1370	1950	1300	3320	2110
29	580	500	320	220	180	190	660	1340	2480	1430	3140	2140
30	580	500	320	220	---	190	720	1430	2950	1720	3160	2160
31	560	---	320	200	---	200	---	1300	---	1720	3620	---
TOTAL	29702	15660	13000	7900	5440	5650	11140	50674	45433	69860	104100	78170
MEAN	958	522	419	255	188	182	371	1635	1514	2254	3358	2606
MAX	1350	560	500	300	200	200	720	2420	4170	8300	6350	3670
MIN	560	500	320	200	180	180	200	780	694	1010	1690	1980
CFSM	.44	.24	.19	.12	.09	.08	.17	.75	.70	1.04	1.55	1.20
IN.	.51	.27	.22	.14	.09	.10	.19	.87	.78	1.20	1.78	1.34
AC-FT	58910	31060	25790	15670	10790	11210	22100	100500	90120	138600	206500	155100

CAL YR 1979 TOTAL 600442 MEAN 1645 MAX 14800 MIN 240 CFSM .76 IN 10.29 AC-FT 1191000
WTR YR 1980 TOTAL 436729 MEAN 1193 MAX 8300 MIN 180 CFSM .55 IN 7.49 AC-FT 866300

15484000 SALCHA RIVER NEAR SALCHAKET--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.29	9.10						---	7.37	10.89	7.85	8.69
2	7.25	9.02						6.81	7.65	10.72	7.88	8.69
3	7.22	8.89						6.98	7.30	9.18	7.72	8.71
4	7.20	8.12						7.27	7.06	8.47	7.63	8.57
5	7.19	7.44						7.55	7.02	8.07	8.23	8.43
6	7.16	7.77						7.87	7.08	7.77	8.55	8.33
7	7.13	8.28						8.10	7.04	7.54	8.26	8.24
8	7.09	8.44						8.13	6.93	7.37	8.10	8.14
9	7.05	---						8.13	6.82	7.76	8.26	8.06
10	7.06	---						8.03	6.72	8.88	8.28	7.99
11	7.05	---						8.04	6.63	8.70	8.05	7.96
12	7.03	---						7.91	6.55	8.42	7.87	7.92
13	7.00	---						7.67	6.50	8.04	7.74	7.88
14	6.99	---						7.62	6.46	7.80	7.69	7.84
15	6.95	---						7.84	6.42	7.63	8.24	7.84
16	6.86	---						7.82	6.56	7.52	8.96	8.00
17	6.76	---						7.71	6.73	7.50	8.96	8.32
18	6.80	---						7.84	7.38	7.44	10.10	8.38
19	7.04	---						7.67	9.06	7.33	9.98	8.35
20	6.84	---						7.46	8.78	7.22	9.67	8.50
21	6.88	---						7.31	8.36	7.13	9.77	8.82
22	6.83	---						7.19	7.93	7.05	9.71	8.58
23	6.66	---						7.26	7.58	6.99	9.46	8.34
24	6.88	---						7.40	7.34	6.93	9.16	8.19
25	7.00	---						7.28	7.14	6.89	8.90	8.11
26	7.31	---						7.25	6.98	6.87	8.71	8.04
27	7.49	---						7.33	6.86	7.00	8.65	7.97
28	7.46	---						7.31	7.82	7.24	8.63	7.93
29	8.49	---						7.28	8.16	7.37	8.54	7.95
30	9.60	---						7.38	8.42	7.66	8.55	7.96
31	9.20	---						7.23	---	7.66	8.79	---
MEAN	7.25	---						---	7.29	7.84	8.61	8.22
MAX	9.60	---						---	9.06	10.89	10.10	8.82
MIN	6.66	---						---	6.42	6.87	7.63	7.84

NOTE.--Gage heights result of backwater from ice, Oct. 18 to Nov. 8.

15485500 TANANA RIVER AT FAIRBANKS

LOCATION.--Lat 64°47'54", long 147°46'32", in SW¼ sec.28, T.1 S., R.1 W., (revised), Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank at south end of Peger Road in Fairbanks, 2.9 mi (4.7 km) southeast of Fairbanks International Airport, and 4.6 mi (7.4 km) upstream from the Chena River.

DRAINAGE AREA.--Undefined. Part of river flows through Salchaket Slough and is ungaged.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 13, 1973, nonrecording gage and Sept. 14, 1973 to Sept. 30, 1975, water-stage recorder at same site and datum.

REMARKS.--Records poor except those for period of no gage-height record, Oct. 18 to Apr. 29, which are estimated and poor.

AVERAGE DISCHARGE.--7 years, 18,810 ft^3/s (532.7 m^3/s), 13,630,000 acre-ft/yr (16.8 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,100 ft^3/s (2,130 m^3/s) Aug. 3, 1979, gage height, 31.84 ft (9.705 m); maximum gage height, 32.24 ft (9.827 m) July 22, 1975; minimum daily discharge, 3,100 ft^3/s (88 m^3/s) Feb. 14 to Mar. 31, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 16, 1967 reached a stage of 34.4 ft (10.49 m), from floodmarks, discharge, about 125,000 ft^3/s (3,500 m^3/s), contained in reports of the Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 60,500 ft^3/s (1,710 m^3/s) July 29, gage height, 30.98 ft (9.443 m); minimum daily, 4,200 ft^3/s (119 m^3/s) Feb. 11 to Apr. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18100	8000	6000	4400	4300	4200	4200	17500	24200	42100	51100	27300
2	17500	8000	6000	4400	4300	4200	4300	17000	23600	48200	49000	26300
3	17400	8000	6000	4400	4300	4200	4300	16200	22900	47400	45800	25500
4	17200	8000	6000	4400	4300	4200	4400	16300	22400	44200	43200	24600
5	16700	8000	6000	4400	4300	4200	4400	16900	24000	42800	41800	23500
6	16300	8000	6000	4400	4300	4200	4500	17500	26600	42100	42700	22200
7	16100	8000	6000	4400	4300	4200	4500	17700	30000	41800	42800	21800
8	15400	7000	6000	4400	4300	4200	4600	18200	32700	41900	44000	21300
9	15000	7000	6000	4400	4300	4200	4700	19200	33700	42100	48100	20400
10	14800	7000	5000	4400	4300	4200	4800	20100	31900	43500	49000	19400
11	15600	7000	5000	4400	4200	4200	4900	20100	31000	44400	48800	18700
12	15700	7000	5000	4400	4200	4200	5000	19700	31600	45300	51500	18100
13	15600	7000	5000	4400	4200	4200	5200	18200	32300	47600	50200	17800
14	15200	7000	5000	4400	4200	4200	5400	17700	31800	49700	50100	17800
15	14700	7000	5000	4400	4200	4200	5600	17600	31000	48800	50000	17900
16	14200	7000	4500	4400	4200	4200	5800	17600	30900	47900	49300	19300
17	13600	7000	4500	4400	4200	4200	6000	17700	30900	48600	49400	22700
18	13000	7000	4500	4400	4200	4200	6500	17900	35500	50100	49500	25500
19	12000	7000	4500	4400	4200	4200	6800	18100	44000	49700	49500	25700
20	12000	7000	4500	4400	4200	4200	7000	17900	40900	47300	45300	26700
21	11000	7000	4500	4300	4200	4200	7400	17700	35200	46900	42200	29500
22	11000	7000	4500	4300	4200	4200	7800	17600	31900	46800	40300	30800
23	11000	6000	4500	4300	4200	4200	8200	17700	29600	45600	37800	30700
24	10000	6000	4500	4300	4200	4200	8800	17900	27000	44300	35100	29300
25	10000	6000	4500	4300	4200	4200	9400	17900	25800	44600	32900	27600
26	10000	6000	4500	4300	4200	4200	10000	18100	25700	46000	31600	26100
27	9000	6000	4500	4300	4200	4200	11000	18100	25300	46900	31200	24900
28	9000	6000	4500	4300	4200	4200	12000	18600	27300	49800	30100	24500
29	9000	6000	4500	4300	4200	4200	14000	19900	30600	58300	29600	24100
30	9000	6000	4500	4300	---	4200	17000	21600	35300	58900	28600	24000
31	9000	---	4500	4300	---	4200	---	23600	---	54800	27800	---
TOTAL	414100	209000	156000	135300	122800	130200	208500	567800	905600	1458400	1318300	714000
MEAN	13360	6967	5032	4365	4234	4200	6950	18320	30190	47050	42530	23800
MAX	18100	8000	6000	4400	4300	4200	17000	23600	44000	58900	51500	30800
MIN	9000	6000	4500	4300	4200	4200	4200	16200	22400	41800	27800	17800
AC-FT	821400	414600	309400	268400	243600	258300	413600	1126000	1796000	2893000	2615000	1416000

CAL YR 1979 TOTAL 8000400 MEAN 21920 MAX 74900 MIN 4400 AC-FT 15870000
WTR YR 1980 TOTAL 6340000 MEAN 17320 MAX 58900 MIN 4200 AC-FT 12580000

15485500 TANANA RIVER AT FAIRBANKS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
OCT							
02...	1445	17200	5.0	578	26800	6	7
JUN							
18...	1400	35600	--	2530	243000	10	16
25...	1330	25100	15.5	790	53500	15	21
JUL							
15...	1500	49400	--	2520	336000	17	27
30...	1430	58000	--	3500	548000	15	24
AUG							
11...	1430	44700	16.0	2620	316000	15	23
SEP							
03...	1430	25200	--	679	46200	--	--
16...	1300	18800	--	452	22900	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT							
02...	9	12	16	*23	*39	*93	*100
JUN							
18...	25	39	57	74	91	99	100
25...	28	34	42	53	75	98	100
JUL							
15...	38	51	64	79	92	99	100
30...	34	47	61	78	92	98	100
AUG							
11...	35	47	59	72	87	99	100
SEP							
03...	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--

* SIEVE ANALYSES

15493000 CHENA RIVER NEAR TWO RIVERS

LOCATION.--Lat 64°53'55", long 146°24'42", in SW¼ sec.19, T.1 N., R.7 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on downstream side of bridge near midspan at mile 37.9 (61.0 km) on the Chena Hot Springs Highway, 20 mi (32 km) east of Two Rivers, and 39 mi (63 km) east of Fairbanks.

DRAINAGE AREA.--941 mi^2 (2,437 km^2).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929 (Alaska Department of Highways TBM).

REMARKS.--Records fair except those for Oct. 17 to Apr. 30, which are estimated and poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--13 years, 648 ft^3/s (18.35 m^3/s), 9.35 in/yr (238 mm/yr), 469,500 acre-ft/yr (579 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft^3/s (476 m^3/s) May 12, 1975, gage height, 21.05 ft (6.416 m); minimum daily, 20 ft^3/s (0.6 m^3/s) Feb. 6 to Mar. 12, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 13, 1967 reached a stage of 26.6 ft (8.1 m), from floodmarks, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,950 ft^3/s (168 m^3/s) July 1, gage height, 18.25 ft (5.563 m); minimum daily, 82 ft^3/s (2.3 m^3/s) Feb. 4-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	594	240	200	140	88	88	100	560	1040	5280	1040	1760
2	573	240	200	140	86	88	110	716	808	2900	896	1900
3	566	230	200	140	84	88	110	848	624	1740	793	1810
4	594	230	200	140	82	88	120	968	560	1180	880	1610
5	608	230	200	130	82	90	120	1130	535	944	992	1470
6	587	220	200	130	82	90	130	1290	500	779	880	1360
7	566	220	190	130	82	90	130	1060	460	681	793	1260
8	538	220	190	130	82	90	140	1010	420	772	984	1170
9	538	220	190	130	82	92	140	984	376	2290	1690	1100
10	524	220	190	120	82	92	140	1010	348	2070	1360	1050
11	510	220	190	120	82	92	150	1020	324	1500	1100	1010
12	498	210	180	120	84	92	150	824	308	1130	960	960
13	486	210	180	120	84	92	150	751	300	968	864	936
14	474	210	180	120	84	90	160	695	292	880	880	920
15	462	210	180	120	84	90	160	695	296	824	1240	1010
16	420	210	180	120	84	90	160	709	380	765	1260	1210
17	400	210	170	120	84	90	160	730	470	702	1580	1240
18	380	210	170	120	84	90	170	660	575	642	2310	1180
19	370	210	170	110	84	90	170	580	808	590	2070	1190
20	360	210	170	110	84	90	170	535	896	570	2200	1380
21	350	210	160	110	84	90	180	470	832	565	2020	1360
22	340	210	160	110	86	90	190	440	674	525	1870	1160
23	330	210	160	110	86	90	200	505	580	495	1730	1060
24	320	210	160	110	86	92	220	545	520	465	1500	1060
25	310	210	160	100	86	92	240	525	460	465	1350	1020
26	300	200	150	100	86	94	260	500	405	510	1310	968
27	290	200	150	100	86	94	280	470	800	595	1340	936
28	280	200	150	96	86	96	310	455	1320	730	1300	904
29	270	200	150	94	86	96	340	455	912	896	1300	880
30	260	200	150	92	---	98	420	425	1740	888	1800	848
31	250	---	140	90	---	100	---	618	---	992	1870	---
TOTAL	13348	6430	5420	3622	2442	2834	5480	22183	18563	34333	42162	35722
MEAN	431	214	175	117	84.2	91.4	183	716	619	1108	1360	1191
MAX	608	240	200	140	88	100	420	1290	1740	5280	2310	1900
MIN	250	200	140	90	82	88	100	425	292	465	793	848
CFSM	.46	.23	.19	.12	.09	.10	.19	.76	.66	1.18	1.45	1.27
IN.	.53	.25	.21	.14	.10	.11	.22	.88	.73	1.36	1.67	1.41
AC-FT	26480	12750	10750	7180	4840	5620	10870	44000	36820	68100	83630	70850

CAL YR 1979 TOTAL 255597 MEAN 700 MAX 7820 MIN 86 CFSM .74 IN 10.10 AC-FT 507000
WTR YR 1980 TOTAL 192539 MEAN 526 MAX 5280 MIN 82 CFSM .56 IN 7.61 AC-FT 381900

15493000 CHENA RIVER NEAR TWO RIVERS--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.42						---	14.32	14.89	17.88	14.89	15.47
2	14.39						---	14.54	14.65	16.35	14.74	15.60
3	14.38						---	14.69	14.42	15.46	14.63	15.52
4	14.42						---	14.82	14.31	15.03	14.72	15.37
5	14.44						---	14.99	14.27	14.79	14.84	15.27
6	14.41						---	15.13	14.21	14.61	14.72	15.18
7	14.38						---	14.91	14.14	14.49	14.63	15.10
8	14.34						---	14.86	14.07	14.60	14.83	15.02
9	14.34						---	14.83	13.99	15.90	15.43	14.96
10	14.32						---	14.86	13.93	15.73	15.19	14.90
11	14.30						---	14.87	13.88	15.29	14.96	14.86
12	14.28						---	14.66	13.84	14.99	14.81	14.81
13	14.26						---	14.58	13.83	14.82	14.71	14.78
14	14.24						---	14.51	13.81	14.72	14.73	14.76
15	14.22						---	14.51	13.82	14.66	15.08	14.86
16	14.14						---	14.53	14.00	14.59	15.10	15.06
17	14.12						---	14.55	14.16	14.52	15.35	15.08
18	14.13						---	14.47	14.34	14.44	15.91	15.03
19	14.11						---	14.35	14.65	14.36	15.73	15.04
20	14.09						---	14.27	14.74	14.33	15.82	15.20
21	14.02						---	14.16	14.67	14.32	15.70	15.18
22	13.90						---	14.11	14.48	14.25	15.58	15.02
23	13.90						---	14.22	14.35	14.20	15.45	14.91
24	13.95						---	14.29	14.25	14.15	15.30	14.92
25	13.99						---	14.25	14.14	14.15	15.18	14.88
26	13.98						---	14.21	14.05	14.23	15.14	14.82
27	14.02						---	14.16	14.64	14.37	15.17	14.78
28	14.02						---	14.13	15.15	14.55	15.13	14.75
29	13.82						14.05	14.13	14.76	14.74	15.13	14.72
30	13.96						14.14	14.08	15.47	14.73	15.51	14.69
31	---						---	14.41	---	14.84	15.57	---
MEAN	---						---	14.50	14.33	14.84	15.15	15.02
MAX	---						---	15.13	15.47	17.88	15.91	15.60
MIN	---						---	14.08	13.81	14.15	14.63	14.69

NOTE.--Gage-height result of backwater from ice, Oct. 17-30 and Apr. 29-30.

15493500 CHENA RIVER NEAR NORTH POLE

LOCATION.--Lat 64°47'47", long 147°11'56", in SW¼ sec.29, T.1 S., R.3 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on left bank 5.5 mi (8.8 km) northeast of North Pole, 6 mi (10 km) upstream from Potlatch Creek, 11 mi (18 km) downstream from Mullen Slough, and 15.7 mi (25.3 km) east of Fairbanks.

DRAINAGE AREA.-1,430 mi^2 (3,704 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1972 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 478.08 ft (145.719 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.-Records fair except those for period of no gage-height record, Oct. 22 to Apr. 23, which are estimated and poor.

AVERAGE DISCHARGE.--8 years, 736 ft^3/s (20.84 m^3/s), 6.99 in/yr (178 mm), 533,200 acre-ft/year (657 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft^3/s (348 m^3/s) May 14, 1975, gage height, 14.18 ft (4.322 m); minimum daily, 50 ft^3/s (1.4 m^3/s) Mar. 1-20, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 13, 1967 was the largest flood since 1905.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,540 ft^3/s (129 m^3/s) July 2, gage height, 7.76 ft (2.365 m); minimum daily, 70 ft^3/s (1.98 m^3/s) Mar. 11-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	810	480	270	150	94	76	82	625	700	2350	1030	2130
2	792	470	270	150	94	76	85	700	1020	4020	1100	2100
3	780	460	270	150	94	76	88	822	996	2840	1060	2220
4	774	450	260	150	94	76	92	948	870	2040	978	2110
5	774	440	250	140	94	76	96	1110	780	1600	1020	1940
6	762	430	250	140	90	76	100	1250	710	1310	1090	1830
7	756	430	240	140	90	76	110	1340	670	1120	1060	1720
8	744	420	240	140	90	76	120	1200	630	1010	1020	1620
9	732	410	230	140	90	76	130	1150	595	1190	1300	1530
10	726	400	230	140	90	76	135	1120	570	2150	1680	1450
11	715	390	220	130	90	70	140	1130	535	1970	1520	1400
12	710	390	220	130	90	70	150	1110	511	1650	1350	1360
13	705	380	220	130	86	70	155	978	493	1400	1210	1310
14	700	370	210	130	86	70	160	918	470	1190	1120	1260
15	690	370	210	130	86	70	170	870	466	1100	1140	1240
16	670	360	200	120	86	70	175	846	457	1060	1420	1340
17	655	350	200	120	86	70	180	840	466	1010	1470	1490
18	645	350	200	120	86	70	185	846	550	960	1930	1540
19	640	340	190	120	86	70	190	804	960	876	2340	1530
20	630	330	190	120	86	70	195	738	1290	816	2410	1570
21	620	330	190	110	80	76	200	700	1310	768	2510	1780
22	590	330	180	110	80	76	210	640	1100	710	2340	1760
23	570	320	180	110	80	76	220	610	960	675	2220	1610
24	560	310	180	110	80	76	230	615	864	640	2080	1530
25	550	300	170	110	80	76	250	625	786	615	1920	1480
26	540	300	170	100	80	76	300	620	720	600	1790	1410
27	530	290	170	100	80	76	370	620	695	615	1730	1360
28	520	280	170	100	80	80	430	615	960	685	1710	1330
29	510	280	160	100	80	80	511	595	1200	738	1660	1300
30	500	280	160	100	---	80	550	580	1060	924	1700	1240
31	490	---	160	100	---	80	---	580	---	954	2090	---
TOTAL	20390	11040	6460	3840	2508	2312	6009	26145	23394	39586	48998	47490
MEAN	658	368	208	124	86.5	74.6	200	843	780	1277	1581	1583
MAX	810	480	270	150	94	80	550	1340	1310	4020	2510	2220
MIN	490	280	160	100	80	70	82	580	457	600	978	1240
CFSM	.46	.26	.15	.09	.06	.05	.14	.59	.55	.89	1.11	1.11
IN.	.53	.29	.17	.10	.07	.06	.16	.68	.61	1.03	1.27	1.24
AC-FT	40440	21900	12810	7620	4970	4590	11920	51860	46400	78520	97190	94200

CAL YR 1979 TOTAL 334546 MEAN 917 MAX 9360 MIN 120 CFSM .64 IN 8.70 AC-FT 663600
WTR YR 1980 TOTAL 238172 MEAN 651 MAX 4020 MIN 70 CFSM .46 IN 6.20 AC-FT 472400

15493500 CHENA RIVER NEAR NORTH POLE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to 1980.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1972 to October 1979 (discontinued).

INSTRUMENTATION.--Temperature recorder since May 5, 1972.

REMARKS.--Temperature record estimated Oct. 24-31.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum, 16°C July 7, 1972, July 11, 12, 1975; minimum, 0.0°C most days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: October 1979: Maximum for period, 4.0°C Oct. 3, 4, 5; minimum, 0.0°C after Oct. 18.

TEMPERATURE, WATER (DEG. C), OCTOBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3.5	3.5										
2	3.5	3.5										
3	4.0	3.5										
4	4.0	4.0										
5	4.0	3.5										
6	3.5	3.0										
7	3.0	3.0										
8	3.0	3.0										
9	3.0	3.0										
10	3.0	3.0										
11	3.5	3.0										
12	3.0	2.5										
13	2.5	2.5										
14	2.5	2.0										
15	2.0	1.0										
16	1.0	.5										
17	.5	.5										
18	.5	.0										
19	.0	.0										
20	.0	.0										
21	.0	.0										
22	.0	.0										
23	.0	.0										
24	.0	.0										
25	.0	.0										
26	.0	.0										
27	.0	.0										
28	.0	.0										
29	.0	.0										
30	.0	.0										
31	.0	.0										
MONTH	4.0	.0										

15493700 CHENA RIVER BELOW MOOSE CREEK DAM

LOCATION.--Lat 64°48'03", long 147°13'40", in SE¼ NW¼ Sec. 30, T.1 S., R.3 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on left bank just downstream from left bank seepage ditch, 1.4 mi (2.3 km) upstream from Potlatch Creek, 3.1 mi (5.0 km) downstream from Moose Creek Dam, 5.0 mi (8.0 km) northeast of North Pole, and 14.7 mi (23.7 km) east of Fairbanks.

DRAINAGE AREA.--1,430 mi^2 (3,704 km^2).

PERIOD OF RECORD.--August 1979 to current year. Records for May 1972 to September 1980 at site 1.8 mi (2.9 km) upstream published as "near North Pole", (station 15493500) may not be equivalent owing to ground-water inflow and seepage through the dam.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (149 m), from topographic map.

REMARKS.--Records fair except those for the period of no gage-height record, Oct. 22 to May 7, which are estimated and poor.

EXTREMES FOR CURRENT PERIOD.--August to September 1979: Maximum discharge during period, 2,070 ft^3/s (58.6 m^3/s) Aug. 3, gage height, 37.31 ft (11.372 m); minimum daily, 885 ft^3/s (25.1 m^3/s) Aug. 28.

Water year 1980: Maximum discharge, 4,500 ft^3/s (127 m^3/s) July 2, gage height, 41.13 ft (12.536 m); minimum daily, 90 ft^3/s (2.5 m^3/s) Feb. 23 to Mar. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST AND SEPTEMBER 1979
MEAN VALUES

DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP
1	2000	1580	9	1400	1290	17	1060	1040	25	945	1030
2	2000	1640	10	1400	1250	18	1030	1040	26	945	1000
3	2070	1540	11	1300	1210	19	995	1060	27	900	1000
4	1900	1400	12	1200	1160	20	970	1090	28	885	980
5	1800	1360	13	1200	1120	21	960	1090	29	890	960
6	1700	1350	14	1160	1060	22	960	1090	30	955	940
7	1600	1380	15	1140	1040	23	960	1090	31	1120	---
8	1500	1330	16	1090	1040	24	945	1080			

AUGUST	TOTAL - 38980	MEAN - 1257	MAX - 2070	MIN - 885	CFSM - .88	IN. - 1.01	AC-FT - 77320
SEPTEMBER	TOTAL - 35240	MEAN - 1175	MAX - 1640	MIN - 940	CFSM - .82	IN. - .92	AC-FT - 69900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	900	490	290	170	110	90	98	640	744	2560	1080	2200
2	860	480	290	170	110	90	100	720	1020	4130	1120	2160
3	840	480	280	170	110	90	100	840	1000	2970	1040	2320
4	820	470	280	160	110	90	110	960	890	2150	990	2220
5	810	460	270	160	110	90	110	1100	810	1630	1040	2030
6	810	450	270	160	100	90	120	1300	768	1350	1090	1890
7	795	440	260	160	100	90	120	1400	728	1130	1040	1760
8	780	440	260	160	100	90	130	1200	688	1030	1010	1640
9	765	430	260	160	100	90	130	1180	652	1150	1240	1540
10	755	420	250	150	100	90	140	1130	624	2240	1680	1460
11	750	420	250	150	100	90	140	1160	588	2070	1540	1380
12	730	410	240	150	100	90	150	1140	560	1670	1330	1330
13	720	400	240	150	100	90	160	1050	540	1400	1180	1300
14	705	400	230	150	96	90	170	965	516	1230	1110	1260
15	696	390	230	140	96	90	180	905	501	1140	1130	1240
16	680	380	220	140	96	90	190	885	492	1060	1400	1320
17	660	380	220	140	96	90	200	880	501	1020	1500	1510
18	644	370	220	140	96	90	200	895	564	970	2010	1540
19	632	360	220	140	96	90	210	860	895	900	2470	1530
20	624	360	210	130	96	90	210	800	1290	840	2480	1580
21	604	350	210	130	96	90	220	756	1320	785	2580	1850
22	590	340	200	130	96	90	220	704	1200	760	2430	1870
23	580	340	200	130	90	90	230	672	1000	728	2330	1690
24	570	330	200	130	90	90	240	668	920	696	2150	1560
25	560	320	190	120	90	90	260	696	860	672	1940	1500
26	550	320	190	120	90	92	320	688	780	664	1760	1450
27	540	310	190	120	90	92	380	676	740	676	1690	1380
28	530	310	180	120	90	94	440	668	1000	740	1690	1320
29	520	300	180	120	90	94	520	652	1200	860	1620	1290
30	510	300	180	120	---	96	580	644	1100	995	1650	1250
31	500	---	170	110	---	96	---	644	---	1020	2170	---
TOTAL	21030	11650	7080	4400	2844	2814	6378	27478	24491	41236	49490	48370
MEAN	678	388	228	142	98.1	90.8	213	886	816	1330	1596	1612
MAX	900	490	290	170	110	96	580	1400	1320	4130	2580	2320
MIN	500	300	170	110	90	90	98	640	492	664	990	1240
CFSM	.47	.27	.16	.10	.07	.06	.15	.62	.57	.93	1.12	1.13
IN.	.55	.30	.18	.11	.07	.07	.17	.71	.64	1.07	1.29	1.26
AC-FT	41710	23110	14040	8730	5640	5580	12650	54500	48580	81790	98160	95940

WTR YR 1980 TOTAL 247261 MEAN 676 MAX 4130 MIN 90 CFSM .47 IN 6.43 AC-FT 490400

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS

LOCATION.--Lat 64°53'10", long 147°14'50", in SW¼NE¼ sec.25, T.1 N., R.2 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on downstream side of left bridge abutment at mile 11.9 (19.1 km) on Chena Hot Springs Highway, and 14 mi (23 km) northeast of Fairbanks.

DRAINAGE AREA.--372 mi^2 (963 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (150 m), from topographic map.

REMARKS.--Records fair except those for Oct. 16 to May 3, which are estimated and poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--14 years, 205 ft^3/s (5.806 m^3/s), 7.48 in/yr (190 mm/yr), 148,500 acre-ft/yr (183 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft^3/s (481 m^3/s) Aug. 13, 1967, gage height, 31.95 ft (9.738 m), from rating curve extended above 3,000 ft^3/s (85 m^3/s) on basis of contracted-opening determination of peak flow; no flow Mar. 11 to Apr. 15, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) July 1, gage height, 17.84 ft (5.438 m); minimum daily, 15 ft^3/s (0.42 m^3/s) Mar. 6 - 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	120	110	40	20	16	20	260	190	913	246	308
2	140	120	110	40	20	16	22	270	186	883	238	300
3	156	120	100	40	19	16	22	280	174	483	216	290
4	273	120	100	40	19	16	22	300	170	329	206	274
5	289	120	100	30	19	16	22	314	172	266	238	268
6	255	120	100	30	19	15	22	340	160	222	206	258
7	234	120	100	30	19	15	22	294	148	198	198	249
8	210	120	100	30	19	15	22	287	132	192	190	242
9	214	120	90	30	19	15	22	273	116	225	190	241
10	202	120	90	30	19	15	20	262	110	370	198	238
11	186	120	90	30	18	15	20	254	102	356	200	238
12	178	120	90	30	18	15	20	230	100	282	200	284
13	168	120	80	30	18	15	20	223	104	239	249	319
14	160	120	80	25	18	15	20	208	100	218	294	310
15	128	120	80	25	18	15	20	192	99	210	401	297
16	140	120	80	25	18	15	20	196	104	200	441	297
17	140	120	80	25	18	15	21	204	132	194	383	345
18	140	120	70	25	18	15	22	194	174	210	348	358
19	140	120	70	25	17	15	24	190	319	196	322	318
20	140	120	70	25	17	15	26	188	239	186	297	294
21	140	110	70	25	17	15	28	174	196	172	276	294
22	130	110	60	25	17	15	30	162	188	160	265	289
23	130	110	60	20	17	15	35	162	184	148	270	273
24	130	110	60	20	17	15	40	170	166	142	266	266
25	130	110	60	20	17	15	50	174	146	136	263	260
26	130	110	50	20	17	15	70	178	124	140	286	254
27	130	110	50	20	17	16	100	176	116	156	303	247
28	130	110	50	20	16	17	150	170	202	186	295	239
29	130	110	50	20	16	18	200	172	200	313	338	236
30	130	110	50	20	---	19	230	158	196	318	356	225
31	130	---	40	20	---	20	---	160	---	258	332	---
TOTAL	5087	3500	2390	835	521	485	1362	6815	4749	8501	8511	8311
MEAN	164	117	77.1	26.9	18.0	15.6	45.4	220	158	274	275	277
MAX	289	120	110	40	20	20	230	340	319	913	441	358
MIN	128	110	40	20	16	15	20	158	99	136	190	225
CFSM	.44	.32	.21	.07	.05	.04	.12	.59	.43	.74	.74	.75
IN.	.51	.35	.24	.08	.05	.05	.14	.68	.47	.85	.85	.83
AC-FT	10090	6940	4740	1660	1030	962	2700	13520	9420	16860	16880	16480

CAL YR 1979 TOTAL 74884 MEAN 205 MAX 2270 MIN 21 CFSM .55 IN 7.49 AC-FT 148500
WTR YR 1980 TOTAL 51067 MEAN 140 MAX 913 MIN 15 CFSM .38 IN 5.11 AC-FT 101300

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.68						---	13.06	11.72	16.01	12.12	12.54
2	11.63						---	13.07	11.67	15.79	12.08	12.49
3	11.69						---	12.91	11.57	13.46	11.94	12.42
4	12.23						---	12.49	11.54	12.64	11.89	12.32
5	12.31						---	12.60	11.55	12.23	12.07	12.28
6	12.14						---	12.76	11.49	11.96	11.89	12.22
7	12.03						---	12.46	11.41	11.77	11.78	12.16
8	11.91						---	12.43	11.30	11.71	11.71	12.12
9	11.93						---	12.34	11.20	11.98	11.68	12.12
10	11.88						---	12.27	11.15	12.91	11.78	12.10
11	11.82						---	12.23	11.11	12.81	11.85	12.10
12	11.78						---	12.07	11.10	12.34	11.85	12.39
13	11.74						---	12.04	11.11	12.07	12.15	12.62
14	11.71						---	11.95	11.10	11.94	12.43	12.56
15	11.57						---	11.78	11.07	11.90	13.09	12.48
16	14.66						---	11.83	11.11	11.82	13.28	12.48
17	---						---	11.94	11.28	11.73	13.00	12.78
18	---						12.40	11.80	11.56	11.90	12.78	12.87
19	---						12.59	11.75	12.61	11.76	12.62	12.61
20	---						12.57	11.73	12.10	11.59	12.46	12.45
21	---						12.59	11.58	11.78	11.51	12.33	12.45
22	---						12.58	11.50	11.65	11.43	12.26	12.42
23	---						12.56	11.50	11.61	11.36	12.29	12.32
24	---						12.61	11.55	11.48	11.32	12.27	12.28
25	---						12.61	11.58	11.35	11.27	12.25	12.24
26	---						12.61	11.61	11.20	11.30	12.39	12.20
27	---						12.67	11.59	11.15	11.41	12.51	12.16
28	---						12.81	11.55	11.87	11.61	12.45	12.11
29	---						12.98	11.56	11.84	12.55	12.73	12.09
30	---						13.03	11.47	11.77	12.58	12.85	12.02
31	---						---	11.49	---	12.20	12.69	---
MEAN	---	---	---	---	---	---	---	12.02	11.48	12.22	12.31	12.35
MAX	---	---	---	---	---	---	---	13.07	12.61	16.01	13.28	12.87
MIN	---	---	---	---	---	---	---	11.47	11.07	11.27	11.68	12.02

NOTE.--Gage heights result of backwater from ice, Oct. 16 and Apr. 18 to May 3.

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-68, 1971 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1972 to current year.

INSTRUMENTATION.--Water temperature recorder since May 9, 1972.

REMARKS.--No temperature record Oct. 17 to Apr. 17, as gage was shut down for winter. The river ice covered from October to May. Records estimated for latter half of October and for first half of April.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 16°C June 30, 1973; minimum, 0.0°C most days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 13.0°C June 27; minimum, 0.0°C most days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

OCTOBER

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
1	2.0	2.0	9	1.5	1.5	17	.0	.0	25	.0	.0
2	2.0	2.0	10	1.5	1.5	18	.0	.0	26	.0	.0
3	2.5	2.0	11	2.0	1.5	19	.0	.0	27	.0	.0
4	2.5	2.5	12	2.0	1.5	20	.0	.0	28	.0	.0
5	2.5	2.0	13	1.5	1.5	21	.0	.0	29	.0	.0
6	2.0	2.0	14	1.5	1.0	22	.0	.0	30	.0	.0
7	2.0	2.0	15	1.0	.0	23	.0	.0	31	.0	.0
8	2.0	1.5	16	.0	.0	24	.0	.0			
									EOM	2.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.0	.0	.5	.5	7.5	7.0	9.0	5.5	9.0	8.5	6.0	5.5
2	.0	.0	.5	.5	7.0	6.0	8.5	6.0	8.5	8.0	6.0	3.5
3	.0	.0	2.0	.5	8.0	6.5	8.5	8.5	9.0	8.5	3.5	3.0
4	.0	.0	3.0	1.0	10.0	8.0	8.5	8.5	9.5	8.5	3.0	2.5
5	.0	.0	3.0	1.0	10.5	9.5	9.5	7.5	9.5	8.5	3.0	2.5
6	.0	.0	3.0	2.0	10.5	10.0	11.0	9.5	10.0	8.5	3.5	3.0
7	.0	.0	3.5	2.5	11.0	10.5	11.0	10.0	10.0	9.5	3.0	3.0
8	.0	.0	4.0	3.5	10.5	9.5	10.5	9.5	10.0	9.0	3.0	2.5
9	.0	.0	3.5	3.5	10.5	8.5	9.0	8.5	10.5	10.0	4.0	3.0
10	.0	.0	4.0	3.5	10.5	10.0	9.0	8.5	10.5	9.5	4.0	4.0
11	.0	.0	4.5	3.5	10.0	9.5	10.0	9.0	10.5	9.5	4.0	3.5
12	.0	.0	4.5	3.5	10.5	9.0	10.5	10.0	11.0	9.5	4.0	3.5
13	.0	.0	4.5	3.5	11.0	10.0	10.0	9.5	11.0	10.0	5.0	4.0
14	.0	.0	4.5	4.0	11.5	10.0	10.0	9.5	10.0	9.0	5.0	5.0
15	.0	.0	5.0	3.5	11.5	10.5	11.0	10.0	9.0	8.5	5.5	5.0
16	.0	.0	6.5	5.0	11.0	10.0	11.5	11.0	8.5	8.5	5.5	5.5
17	.0	.0	6.5	6.0	11.0	10.0	11.5	10.0	8.5	8.0	5.5	4.0
18	.0	.0	5.5	5.0	10.0	9.0	11.0	9.5	8.5	8.5	4.0	3.5
19	.0	.0	6.5	5.5	9.0	8.0	11.0	10.5	8.5	7.5	4.0	3.5
20	.0	.0	6.5	5.5	8.0	7.5	11.0	10.0	7.5	6.5	4.0	3.0
21	.0	.0	5.5	5.0	7.5	7.0	11.5	10.5	6.5	6.0	3.0	1.5
22	.0	.0	6.5	5.5	8.0	7.5	12.0	11.0	6.0	5.5	1.5	1.0
23	.0	.0	8.0	6.0	9.0	7.5	12.0	11.0	6.0	6.0	1.0	.5
24	.5	.0	8.0	7.0	10.5	9.0	12.5	11.5	6.0	5.5	2.0	1.0
25	.5	.5	9.0	7.5	10.5	9.5	12.5	11.5	6.0	5.5	2.0	2.0
26	.5	.5	9.5	8.0	12.5	10.5	11.5	10.5	6.5	6.0	2.5	2.0
27	.5	.5	9.5	8.5	13.0	12.5	10.5	10.0	6.5	6.0	3.0	2.5
28	.5	.5	9.5	9.0	12.5	10.5	9.5	10.0	7.5	6.5	3.0	3.0
29	.5	.5	9.0	8.5	10.5	9.5	9.5	8.5	7.5	6.5	3.0	2.5
30	.5	.5	8.5	8.0	9.5	9.0	8.5	8.0	6.5	6.0	3.0	2.5
31	---	---	8.0	7.0	---	---	9.0	8.0	6.0	5.5	---	---
MONTH	.5	.0	9.5	.5	13.0	6.0	12.5	5.5	11.0	5.5	6.0	.5
YEAR	13.0	.0										

15514000 CHENA RIVER AT FAIRBANKS

LOCATION.--Lat 64°50'45", long 147°42'04", in NW¼ sec.11, T.1 S., R.1 W., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 100 ft (30 m) downstream from Steese Highway bridge in Fairbanks, 800 ft (240 m) upstream from Wendell Street bridge, 0.3 mi (0.5 km) upstream from Noyes Slough, 11 mi (18 km) upstream from mouth, and 11 mi (18 km) downstream from Chena Slough.

DRAINAGE AREA.--1,980 mi^2 (5,130 km^2), approximately.

PERIOD OF RECORD.--July 1947 to September 1948 (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder and nonrecording gage used as supplementary gage below stage of 1.30 ft (0.396 m). Datum of gage is 422.92 ft (128.906 m) National Geodetic Vertical Datum of 1929. See WSP 1936 and 2136 for history of changes prior to Apr. 27, 1968.

REMARKS.--Records good except those for Oct. 20 to May 1, which are estimated and poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years (water years 1949-80), 1,402 ft^3/s (39.70 m^3/s), 9.62 in/yr (244 mm/yr), 1,016,000 acre-ft/yr (1.25 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,400 ft^3/s (2,110 m^3/s) Aug. 15, 1967, gage height, 18.82 ft (5.736 m), site then in use; minimum not determined, monthly means of 120 ft^3/s (3.4 m^3/s) published for February 1953 and March 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Outstanding floods in early May 1905 and 1911 reached stages of about 17 ft (5.2 m) and 16 ft (4.9 m), respectively, present site and datum, probably some backwater from ice, from profile of floodmarks in a report by Corps of Engineers. Flood of late August 1930 reached a stage of 16.8 ft (5.12 m), present site and datum, from information in above report. Flood of May 11-14, 1937 reached a stage of 15.7 ft (4.79 m) present datum, from floodmarks at Cushman Street bridge, 16.5 ft (5.03 m), present site and datum, backwater from ice, from above report. Prior to construction of a dike in 1941, it was possible for floodwaters from the Tanana River in Piledriver Slough to be diverted to the Chena River through Chena Slough.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,110 ft^3/s (145 m^3/s) July 2, gage height, 5.39 ft (1.643 m), no peaks above base of 6,000 ft^3/s (170 m^3/s); minimum daily, 190 ft^3/s (5.4 m^3/s) Mar. 16-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	540	450	290	230	210	220	837	994	1910	1460	2490
2	1110	540	450	290	230	210	240	945	1380	4580	1550	2470
3	1090	520	450	290	230	210	260	1100	1470	3960	1490	2590
4	1090	520	450	290	230	210	270	1260	1400	2790	1410	2630
5	1160	520	440	280	230	210	280	1420	1520	2200	1390	2470
6	1160	500	440	280	230	200	290	1620	1370	1850	1490	2330
7	1120	500	440	280	220	200	300	1750	1210	1610	1460	2210
8	1110	500	440	270	220	200	300	1690	1180	1500	1430	2100
9	1080	500	420	270	220	200	310	1610	1110	1490	1530	1990
10	1080	500	420	270	220	200	310	1590	918	2130	1960	1900
11	1060	500	420	260	220	200	320	1550	860	2560	2060	1820
12	1040	500	400	260	220	200	320	1580	841	2300	1900	1760
13	1010	500	400	250	220	200	320	1490	800	2020	1750	1700
14	996	500	400	250	220	200	320	1390	780	1820	1640	1660
15	972	500	380	250	220	200	330	1310	760	1690	1590	1650
16	920	500	380	250	220	190	330	1250	746	1600	1760	1680
17	905	490	380	250	220	190	340	1270	765	1540	1900	1800
18	868	490	360	250	220	190	340	1260	853	1460	2040	1910
19	823	490	360	250	220	190	350	1250	1160	1390	2600	1920
20	780	480	360	250	220	190	360	1180	1710	1250	2790	1910
21	740	480	340	240	220	190	370	1110	1800	1140	2940	2080
22	700	480	340	240	220	190	390	1050	1830	1060	2910	2230
23	660	470	340	240	220	190	410	981	1760	1010	2750	2110
24	620	470	320	240	220	190	440	958	1500	960	2590	1980
25	600	460	320	240	220	190	480	1040	1300	931	2400	1900
26	600	460	320	240	210	190	540	1040	1200	885	2230	1850
27	580	460	300	240	210	190	600	1020	1100	922	2130	1780
28	580	460	300	240	210	190	650	1010	1000	1000	2110	1730
29	560	460	300	240	210	200	685	995	1200	1200	2060	1690
30	560	460	300	240	---	200	751	973	1400	1390	2020	1650
31	540	---	300	240	---	210	---	951	---	1420	2250	---
TOTAL	27254	14750	11720	7970	6400	6130	11426	38480	35917	53568	61590	59990
MEAN	879	492	378	257	221	198	381	1241	1197	1728	1987	2000
MAX	1160	540	450	290	230	210	751	1750	1830	4580	2940	2630
MIN	540	460	300	240	210	190	220	837	746	885	1390	1650
CFSM	.44	.25	.19	.13	.11	.10	.19	.63	.61	.87	1.00	1.01
IN.	.51	.28	.22	.15	.12	.12	.21	.72	.67	1.01	1.16	1.13
AC-FT	54060	29260	23250	15810	12690	12160	22660	76330	71240	106300	122200	119000

CAL YR 1979 TOTAL 450084 MEAN 1233 MAX 10500 MIN 190 CFSM .62 IN 8.46 AC-FT 892700
WTR YR 1980 TOTAL 335195 MEAN 916 MAX 4580 MIN 190 CFSM .46 IN 6.30 AC-FT 664900

15514000 CHENA RIVER AT FAIRBANKS--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.40	.86					---	1.01	1.22	2.31	1.79	2.99
2	1.36	.92					---	1.15	1.70	4.95	1.91	2.97
3	1.34	.82					---	1.35	1.82	4.40	1.84	3.09
4	1.34	.86					---	1.55	1.73	3.29	1.73	3.13
5	1.43	.90					---	1.75	---	2.67	1.71	2.97
6	1.43	.78					---	2.00	---	2.28	1.83	2.82
7	1.38	.61					---	2.17	---	1.99	1.80	2.68
8	1.36	.68					---	2.08	---	1.85	1.76	2.55
9	1.32	---					---	1.99	---	1.84	1.89	2.44
10	1.32	---					---	1.96	---	2.59	2.40	2.34
11	1.30	---					---	1.92	---	3.06	2.51	2.24
12	1.27	---					---	1.95	---	2.78	2.34	2.17
13	1.24	---					---	1.84	---	2.47	2.17	2.10
14	1.22	---					---	1.72	---	2.25	2.02	2.05
15	1.19	---					---	1.61	---	2.09	1.96	2.04
16	1.12	---					---	1.54	---	1.98	2.17	2.07
17	1.10	---					---	1.56	---	1.90	2.34	2.23
18	1.05	---					---	1.55	---	1.80	2.49	2.35
19	.99	---					---	1.54	---	1.71	3.10	2.36
20	.99	---					---	1.45	---	1.53	3.30	2.35
21	.96	---					---	1.36	---	1.40	3.44	2.54
22	.85	---					---	1.29	---	1.30	3.42	2.70
23	.74	---					---	1.20	---	1.24	3.25	2.57
24	.76	---					---	1.17	---	1.17	3.09	2.42
25	.79	---					---	1.27	---	1.13	2.88	2.34
26	.84	---					---	1.28	---	1.07	2.71	2.28
27	.73	---					---	1.24	---	1.12	2.59	2.19
28	.77	---					.72	1.23	---	1.23	2.57	2.14
29	.80	---					.79	1.22	---	1.48	2.52	2.08
30	.70	---					.89	1.19	1.72	1.71	2.47	2.03
31	.79	---					---	1.16	---	1.75	2.72	---
MEAN	1.09	---	---	---	---	---	---	1.53	---	2.08	2.41	2.44
MAX	1.43	---	---	---	---	---	---	2.17	---	4.95	3.44	3.13
MIN	.70	---	---	---	---	---	---	1.01	---	1.07	1.71	2.03

NOTE.--Gage heights result from backwater from ice, Oct. 20 to Nov. 8, and Apr. 28 to May 1.

15515500 TANANA RIVER AT NENANA
(National stream-quality accounting network station)

LOCATION.--Lat 64°33'55", long 149°05'30", in SE¼ sec.14, T.4 S., R.8 W., Hydrologic Unit 19030004, on left bank on east end of Alaska Railroad dock in Nenana and 0.3 mi (0.5 km) upstream from Nenana River.

DRAINAGE AREA.--25,600 mi² (66,300 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1962 to current year.

REVISED RECORDS.--WSP 2136: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 338.50 ft (103.175 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 10, 1965, on right bank 280 ft (85 m) downstream from railroad bridge 0.5 mi (0.8 km) upstream at present datum. Mar. 10, 1965 to Mar. 23, 1968, nonrecording gage on railroad bridge 0.5 mi (0.8 km) upstream at present datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 21 to May 6, which are estimated and poor. NOAA Satellite telemetry at station.

AVERAGE DISCHARGE.--18 years, 23,460 ft³/s (664.4 m³/s), 12.44 in/yr (316 mm/yr), 17,000,000 acre-ft/yr (21.0 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 186,000 ft³/s (5,270 m³/s) Aug. 18, 1967, gage height, 18.90 ft (5.761 m), site then in use; minimum daily, 4,000 ft³/s (110 m³/s) Mar. 6-20, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1948 reached a stage of 15.9 ft (4.85 m), discharge, about 135,000 ft³/s (3,820 m³/s), contained in reports of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70,000 ft³/s (1,980 m³/s) July 30, gage height, 9.94 ft (3.030 m); minimum daily, 6,400 ft³/s (181 m³/s) Dec. 28 to Jan. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22800	11000	8200	6400	6600	7400	7800	18000	22500	51200	59800	33400
2	21900	11000	8200	6400	6600	7400	7800	19000	22100	58000	56500	32700
3	21500	11000	8000	6400	6600	7400	7800	20000	22200	60600	52900	31500
4	21400	11000	8000	6400	6600	7400	7800	19000	22200	57000	50500	30300
5	20400	11000	8000	6400	6600	7400	8000	19000	23900	54000	49800	28900
6	20000	10000	8000	6400	6800	7400	8000	20000	28900	51700	49800	27700
7	19800	10000	7800	6400	6800	7400	8000	20300	36100	51400	50600	26500
8	19200	10000	7800	6400	6800	7400	8200	21000	41900	52900	51200	25500
9	18800	10000	7800	6400	7000	7400	8200	21500	41200	53000	52900	24600
10	19400	10000	7800	6400	7000	7400	8200	22700	38600	52100	55900	23800
11	20100	9400	7600	6400	7200	7400	8200	23200	37100	53000	56600	23200
12	20100	9400	7600	6400	7200	7400	8600	22500	36700	54500	57900	22400
13	19400	9400	7600	6400	7400	7400	8600	21600	36800	58100	58800	21700
14	19000	9400	7600	6400	7600	7400	9000	20500	36000	61200	57900	21400
15	18600	9400	7400	6400	7600	7400	9000	19800	35600	60500	57800	21700
16	18200	9000	7400	6400	7600	7400	9500	19300	35000	58400	56400	24100
17	17800	9000	7400	6400	7600	7400	10000	19100	35500	59100	56700	27000
18	17400	9000	7200	6400	7600	7400	10000	19100	40100	65700	56600	29100
19	17000	9000	7200	6400	7600	7400	10000	18700	55700	67600	57400	30000
20	16000	9000	7000	6400	7600	7400	11000	18100	57800	63700	56200	30300
21	16000	9000	7000	6400	7600	7600	11000	17600	50300	61300	53200	31700
22	15000	8600	7000	6400	7600	7600	12000	16900	43900	61000	51300	34000
23	15000	8600	6800	6400	7600	7600	13000	17000	39900	59800	49300	33900
24	14000	8600	6800	6400	7600	7600	13000	17200	37000	58600	46500	32800
25	14000	8600	6600	6400	7600	7600	13000	17100	35700	57600	43400	31300
26	13000	8600	6600	6400	7600	7600	14000	17200	35200	58800	40700	29800
27	13000	8600	6600	6400	7600	7600	14000	17600	35300	60800	38900	28700
28	12000	8200	6400	6400	7600	7600	15000	18500	36400	63800	37100	28100
29	12000	8200	6400	6400	7600	7600	16000	19700	40100	68200	35500	27700
30	12000	8200	6400	6400	---	7600	17000	20500	44100	68600	34700	27400
31	12000	---	6400	6400	---	7600	---	21300	---	63400	33800	---
TOTAL	536800	282200	226600	198400	210800	231600	311700	603000	1103800	1825600	1566600	841200
MEAN	17320	9407	7310	6400	7269	7471	10390	19450	36790	58890	50540	28040
MAX	22800	11000	8200	6400	7600	7600	17000	23200	57800	68600	59800	34000
MIN	12000	8200	6400	6400	6600	7400	7800	16900	22100	51200	33800	21400
CFSM	.68	.37	.29	.25	.28	.29	.41	.76	1.44	2.30	1.97	1.10
IN.	.78	.41	.33	.29	.31	.34	.45	.88	1.60	2.65	2.28	1.22
AC-FT	1065000	559700	449500	393500	418100	459400	618300	1196000	2189000	3621000	3107000	1669000

CAL YR 1979 TOTAL 9334100 MEAN 25570 MAX 79200 MIN 6400 CFSM 1.00 IN 13.56 AC-FT 18510000
WTR YR 1980 TOTAL 7938300 MEAN 21690 MAX 68600 MIN 6400 CFSM .85 IN 11.54 AC-FT 15750000

15515500 TANANA RIVER AT NENANA--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.91							---	3.97	7.84	8.81	5.60
2	3.78							---	3.92	8.62	8.45	5.51
3	3.72							---	3.93	8.90	8.05	5.35
4	3.72							---	3.94	8.51	7.76	5.18
5	3.57							---	4.22	8.17	7.66	4.99
6	3.50							---	4.99	7.90	7.66	4.82
7	3.48							3.12	5.95	7.87	7.76	4.64
8	3.38							3.23	6.67	8.04	7.84	4.49
9	3.33							3.32	6.58	8.05	8.04	4.33
10	3.44							3.51	6.26	7.96	8.38	4.20
11	3.59							3.59	6.07	8.06	8.46	4.10
12	3.59							3.53	6.02	8.23	8.61	3.97
13	3.47							3.42	6.04	8.63	8.70	3.85
14	3.38							3.29	5.94	8.97	8.60	3.79
15	3.29							3.21	5.89	8.89	8.59	3.84
16	3.21							3.18	5.81	8.66	8.43	4.25
17	3.13							3.17	5.87	8.74	8.48	4.72
18	3.05							3.21	6.45	9.46	8.46	5.01
19	3.06							3.18	8.36	9.67	8.54	5.14
20	3.07							3.12	8.59	9.24	8.41	5.18
21	---							3.05	7.72	8.98	8.08	5.38
22	---							2.97	6.92	8.95	7.86	5.68
23	---							2.98	6.42	8.82	7.60	5.66
24	---							3.03	6.06	8.68	7.25	5.53
25	---							3.00	5.90	8.57	6.86	5.32
26	---							3.03	5.83	8.70	6.52	5.12
27	---							3.10	5.84	8.92	6.30	4.96
28	---							3.29	5.99	9.26	6.07	4.87
29	---							3.51	6.46	9.75	5.87	4.81
30	---							3.66	6.95	9.79	5.76	4.77
31	---							3.79	---	9.21	5.65	---
MEAN	---							---	5.99	8.71	7.73	4.84
MAX	---							---	8.59	9.79	8.81	5.68
MIN	---							---	3.92	7.84	5.65	3.79

NOTE.--Gage height result of backwater from ice Oct. 19 and 20.

15515500 TANANA RIVER AT NENANA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-56, 1963-64, 1966-75, and 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 11...	1315	19900	270	6.8	3.0	22	12.4	1	1	130	20
DEC 28...	1445	6440	295	7.2	.0	6.2	8.5	6	3	150	29
FEB 14...	1400	7570	240	6.8	.0	3.2	8.0	K3	0	140	21
MAR 06...	1245	7450	279	6.4	.0	4.2	8.4	K3	K5	150	28
APR 09...	1400	8170	310	6.7	.0	5.5	10.6	K2	K2	140	30
MAY 07...	1600	19900	210	7.4	7.0	64	11.3	K3	K2	120	32
JUN 17...	1600	32900	230	7.6	14.5	320	9.4	29	K6	120	48
AUG 18...	1430	58800	206	7.0	12.0	450	9.6	K43	K33	91	19
SEP 10...	1630	23900	240	7.8	8.0	62	11.0	K4	<1	120	28

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT 11...	37	8.4	4.1	2.0	130	36	1.4	.2	11	169	165
DEC 28...	46	9.1	4.6	2.5	150	39	2.0	.2	16	201	194
FEB 14...	43	8.8	4.0	2.3	150	32	1.3	.2	15	185	181
MAR 06...	45	9.3	4.4	2.2	150	34	1.2	.2	16	188	187
APR 09...	41	8.4	4.0	2.3	130	30	1.6	.1	14	168	166
MAY 07...	34	7.4	3.7	2.2	130	25	1.0	.1	12	--	151
JUN 17...	37	7.2	4.8	2.2	102	30	--	.2	8.0	136	--
AUG 18...	27	5.8	3.9	1.7	88	31	1.7	.1	6.9	117	125
SEP 10...	34	7.8	4.4	2.0	118	31	1.9	.1	10	128	148

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
OCT 11...	.14	.15	.030	.040	.38	.42	.41	.00	.46	.55	.61
DEC 28...	.21	.17	.130	.070	.00	.05	.12	.00	.12	.33	.29
FEB 14...	.19	.18	.100	.080	.31	.35	.41	.00	.43	.60	.61
MAR 06...	.21	.24	.020	.130	.14	.04	.16	.00	.17	.37	.41
APR 09...	.13	.13	.080	.060	.44	.49	.52	.00	.55	.65	.68
MAY 07...	.12	.31	.080	.080	.72	.39	.80	.33	.47	.92	.78
JUN 17...	.17	.23	.590	.030	.07	.43	.66	.20	.46	.83	.69
AUG 18...	.08	.89	.000	.000	1.1	.34	1.1	.76	.34	1.2	1.2
SEP 10...	.20	.82	.000	.010	.63	.39	.63	.23	.40	.83	1.2

K NON-IDEAL COLONY COUNT

15515500 TANANA RIVER AT NENANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)
OCT 11...	.060	.010	--	--	--	--	6.2	--	--	--	--
DEC 28...	.020	.020	--	--	--	--	--	5.8	--	1	0
FEB 14...	.040	.000	--	--	--	--	1.1	--	--	--	--
MAR 06...	.020	.010	--	--	--	--	2.8	--	--	--	--
APR 09...	.070	.060	--	--	--	--	--	3.5	.1	1	1
MAY 07...	.300	.080	--	--	--	--	--	6.3	--	6	5
JUN 17...	.560	.020	.000	.000	.010	.000	--	--	--	--	--
AUG 18...	1.200	.000	--	--	--	--	5.1	--	--	--	--
SEP 10...	.140	.040	--	--	--	--	5.4	--	--	--	--

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--
DEC 28...	1	300	200	60	1	0	8	0	0	0	0
FEB 14...	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--
APR 09...	0	100	50	50	0	0	3	0	0	0	0
MAY 07...	1	100	50	50	2	--	<1	0	0	0	8
JUN 17...	1	300	300	0	2	0	4	40	40	0	15
AUG 18...	--	--	--	--	--	--	--	--	--	--	--
SEP 10...	--	--	--	--	--	--	--	--	--	--	--

DATE	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--
DEC 28...	0	<3	14	12	2	1700	1700	20	12	5	7
FEB 14...	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--
APR 09...	0	<3	0	0	4	1000	970	30	6	0	7
MAY 07...	--	<3	32	25	7	14000	13000	640	210	180	26
JUN 17...	15	0	90	81	9	33000	33000	150	65	36	29
AUG 18...	--	--	--	--	--	--	--	--	--	--	--
SEP 10...	--	--	--	--	--	--	--	--	--	--	--

15515500 TANANA RIVER AT NENANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)
OCT											
11...	--	--	--	--	--	--	--	--	--	--	--
DEC											
28...	140	30	110	.1	.1	.0	4	4	0	0	0
FEB											
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
06...	--	--	--	--	--	--	--	--	--	--	--
APR											
09...	90	20	70	.0	.0	.0	0	0	4	1	0
MAY											
07...	350	290	60	.1	.1	.0	21	18	3	1	1
JUN											
17...	690	680	10	.1	.1	.0	43	40	3	1	1
AUG											
18...	--	--	--	--	--	--	--	--	--	--	--
SEP											
10...	--	--	--	--	--	--	--	--	--	--	--

DATE	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
11...	--	--	--	--	--	--	--	438	23500	22
DEC										
28...	1	0	0	0	40	30	10	46	800	51
FEB										
14...	--	1	--	--	--	--	--	15	307	29
MAR										
06...	--	0	--	--	--	--	--	14	282	61
APR										
09...	1	0	0	0	0	0	6	23	507	71
MAY										
07...	0	0	0	0	50	--	<3	896	48100	43
JUN										
17...	0	0	0	0	120	0	180	1010	89700	47
AUG										
18...	--	0	--	--	--	--	--	1960	311000	74
SEP										
10...	--	1	--	--	--	--	--	211	13600	68

15515500 TANANA RIVER AT NENANA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	OCT 11,79		DEC 29,79		FEB 14,80		MAR 6,80		APR 9,80	
TIME	1315		1445		1400		1245		1400	
TOTAL CELLS/ML	3300		340		35		1100		320	
DIVERSITY: DIVISION	0.8		1.1		1.0		0.9		1.1	
.CLASS	0.8		1.1		1.0		0.9		1.1	
..ORDER	0.9		1.9		1.4		1.7		1.3	
...FAMILY	1.2		2.1		1.4		1.7		1.5	
....GENUS	1.4		2.2		1.8		2.1		1.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	60	2	--	-	5	14	--	-	--	-
....CHLORELLA	*	0	70#	21	10#	29	--	-	20	6
....DICTYOSPHAERIUM	20	1	--	-	--	-	330#	31	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	*	0	--	-	--	-	--	-	--	-
....SCENEDESMUS	35	1	--	-	--	-	--	-	--	-
..TETRASPORALES										
...COCCOMYXACEAE										
....ELAKATOTHRIX	--	-	--	-	--	-	55	5	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	5	2
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	50	2	5	1	15#	43	--	-	10	3
....MELOSIRA	20	1	10	3	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	25	1	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	10	3
...DIATOMACEAE										
....DIATOMA	20	1	5	1	5	14	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	35	1	--	-	--	-	--	-	--	-
....FRAGILARIA	110	3	--	-	--	-	--	-	25	8
....SYNEDRA	55	2	--	-	--	-	--	-	5	2
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	5	2
...NAVICULACEAE										
....NAVICULA	40	1	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	86	3	5	1	--	-	--	-	5	2
...TABELLARIACEAE										
....TABELLARIA	*	0	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	100#	29	--	-	210#	19	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	40	1	20	6	--	-	--	-	230#	73
....APHANIZOMENON	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	340#	32	--	-
....OSCILLATORIA	--	-	--	-	--	-	120	12	--	-
....SCHIZOTHRIX	2700#	81	130#	37	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM, EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15515500 TANANA RIVER AT NENANA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	MAY 7,80	JUN 17,80	AUG 18,80	SEP 10,80
TIME	1600	1600	1430	1630
TOTAL CELLS/ML	450	160	700	1200
DIVERSITY: DIVISION	0.4	0.0	0.7	0.5
.CLASS	0.4	0.0	0.7	0.5
..ORDER	1.0	0.9	1.5	0.5
...FAMILY	2.3	1.3	1.8	0.5
....GENUS	2.7	1.3	1.8	0.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	--	-
....CHLORELLA	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	52	4
..TETRASPORALES								
...COCCOMYXACEAE								
....ELAKATOTHRIX	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	39	9	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	26	6	--	-	14	2	13	1
....MELOSIRA	39	9	100#	64	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	26	6	--	-	41	6	13	1
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	--	-	--	-
....FRAGILARIA	130#	29	--	-	--	-	--	-
....SYNEDRA	39	9	--	-	14	2	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	27	4	--	-
...NAVICULACEAE								
....NAVICULA	39	9	29#	18	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	120#	26	29#	18	27	4	13	1
...TABELLARIACEAE								
....TABELLARIA	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	410#	59	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
....APHANIZOMENON	--	-	--	-	160#	24	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	1100#	92
....OSCILLATORIA	--	-	--	-	--	-	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

15535000 CARIBOU CREEK NEAR CHATANIKA

LOCATION.-Lat 65°09'00", long 147°33'05", in NW¼NE¼ sec.28, T.4 N., R.1 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on left bank 2.0 mi (3.2 km) upstream from mouth, 3.5 mi (5.6 km) northwest of Chatanika, and 21.6 mi (34.8 km) north of Fairbanks.

DRAINAGE AREA.--9.19 mi^2 (23.8 km^2).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 870 ft (270 m), from topographic map.

REMARKS.--Records fair except those for Oct. 15 to June 4, which are estimated and poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years, 4.62 ft^3/s (0.131 m^3/s), 6.83 in/yr (173 mm/yr), 3,350 acre-ft/yr (4.13 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 117 ft^3/s (3.31 m^3/s) May 12, 1975, gage height, 5.47 ft (1.667 m), flow over ice; no flow Dec. 11, 1975 to Apr. 4, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27 ft^3/s (0.76 m^3/s) June 18, gage height, 1.64 ft (0.500 m); minimum daily, 0.4 ft^3/s (0.01 m^3/s) Mar. 1-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	2.9	2.3	1.0	.50	.40	.80	6.0	5.0	10	6.6	5.9
2	3.6	2.9	2.3	1.0	.50	.40	.80	6.6	5.0	7.1	6.1	5.9
3	5.4	2.8	2.2	1.0	.50	.40	.90	7.0	4.8	5.2	5.6	5.9
4	5.9	2.8	2.1	.90	.50	.40	1.0	7.4	4.6	4.6	6.4	5.9
5	5.4	2.8	2.0	.90	.50	.40	1.0	7.8	4.3	3.9	6.4	5.9
6	5.0	2.8	1.9	.90	.50	.40	1.0	8.0	3.4	3.7	5.9	5.6
7	4.8	2.8	1.8	.90	.50	.40	1.1	7.6	3.0	3.7	5.6	5.6
8	4.6	2.8	1.8	.90	.50	.40	1.1	7.4	2.4	3.7	5.4	5.2
9	4.3	2.7	1.7	.80	.50	.40	1.1	7.0	2.0	3.9	5.2	5.2
10	4.3	2.7	1.7	.80	.50	.40	1.1	6.6	2.0	8.7	5.0	5.2
11	4.3	2.7	1.6	.80	.50	.40	1.0	6.2	1.8	6.4	4.8	5.2
12	4.3	2.7	1.6	.80	.50	.40	1.0	6.0	2.0	5.0	4.8	5.2
13	4.1	2.7	1.6	.80	.50	.40	1.0	5.8	2.0	4.8	4.6	5.2
14	4.1	2.7	1.5	.70	.50	.40	1.0	5.4	1.8	4.8	5.0	5.2
15	3.8	2.7	1.5	.70	.50	.40	1.0	5.2	1.8	4.3	5.2	6.4
16	3.6	2.6	1.5	.70	.50	.40	1.0	5.0	2.0	4.1	5.2	6.8
17	3.4	2.6	1.4	.70	.50	.40	1.0	5.0	2.5	3.9	5.9	6.8
18	3.2	2.6	1.4	.70	.50	.40	1.1	4.8	18	3.7	7.4	6.6
19	3.2	2.6	1.4	.60	.50	.40	1.1	4.8	11	3.7	9.6	6.6
20	3.1	2.6	1.4	.60	.50	.40	1.2	4.6	9.0	3.7	9.9	7.1
21	3.1	2.6	1.3	.60	.50	.40	1.3	4.4	7.4	3.6	8.7	6.8
22	3.0	2.6	1.3	.60	.50	.40	1.4	4.2	4.3	3.6	7.4	6.6
23	3.0	2.5	1.3	.60	.50	.40	1.6	4.0	3.4	3.4	7.1	6.2
24	3.0	2.5	1.2	.60	.50	.40	1.8	4.2	2.7	3.4	6.6	6.0
25	3.0	2.5	1.2	.60	.50	.40	2.0	4.4	3.0	3.6	6.4	5.6
26	3.0	2.5	1.2	.60	.50	.50	2.4	4.4	2.5	3.7	6.4	5.6
27	3.0	2.5	1.2	.60	.50	.50	3.0	4.4	3.0	5.4	6.1	5.6
28	2.9	2.5	1.1	.60	.50	.50	4.0	4.2	3.2	9.0	5.9	5.4
29	2.9	2.4	1.1	.50	.50	.60	5.0	4.0	3.2	11	5.9	5.4
30	2.9	2.4	1.1	.50	---	.60	5.6	4.0	4.8	8.4	5.9	5.4
31	2.9	---	1.0	.50	---	.70	---	4.8	---	6.8	5.9	---
TOTAL	116.7	79.5	47.7	22.50	14.50	13.40	48.40	171.2	125.9	160.8	192.9	176.0
MEAN	3.76	2.65	1.54	.73	.50	.43	1.61	5.52	4.20	5.19	6.22	5.87
MAX	5.9	2.9	2.3	1.0	.50	.70	5.6	8.0	18	11	9.9	7.1
MIN	2.9	2.4	1.0	.50	.50	.40	.80	4.0	1.8	3.4	4.6	5.2
CFSM	.41	.29	.17	.08	.05	.05	.18	.60	.46	.57	.68	.64
IN.	.47	.32	.19	.09	.06	.05	.20	.69	.51	.65	.78	.71
AC-FT	231	158	95	45	29	27	96	340	250	319	383	349

CAL YR 1979 TOTAL 1877.00 MEAN 5.14 MAX 60 MIN 1.0 CFSM .56 IN 7.60 AC-FT 3720
WTR YR 1980 TOTAL 1169.50 MEAN 3.20 MAX 18 MIN .40 CFSM .35 IN 4.73 AC-FT 2320

NOTE.--No gage-height record Nov. 1 to June 4.

15564900 KOYUKUK RIVER AT HUGHES

LOCATION.--Lat 66°02'51", long 154°15'30", in SE¼SE¼ sec.33, T.8 N., R.22 E., Hydrologic Unit 19030005, on left bank at north end of runway at Hughes and 0.6 mi (1.0 km) upstream from Hughes Creek.

DRAINAGE AREA.--18,700 mi^2 (48,400 km^2), approximately.

PERIOD OF RECORD.--June 1960 to current year.

REVISED RECORDS.--WSP 1936: 1960.

GAGE.--Nonrecording gage read twice daily. Altitude of gage is 250 ft (76 m), from topographic map. Prior to Sept. 30, 1960, on right bank at same datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 14 to May 13, which are estimated and poor.

AVERAGE DISCHARGE.--20 years, 14,200 ft^3/s (402.1 m^3/s), 10.31 in/yr (262 mm/yr), 10,290,000 acre-ft/yr (12.7 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 266,000 ft^3/s (7,530 m^3/s) June 6, 1964, gage height, 31.09 ft (9.476 m); maximum gage height, 34.33 ft (10.464 m) May 26, 1965, from floodmarks, backwater from ice; minimum daily discharge, 200 ft^3/s (5.7 m^3/s) Apr. 1-15, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1937 reached a stage of about 34 ft (10.4 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 122,000 ft^3/s (3,460 m^3/s) June 8, gage height, 24.13 ft (7.355 m); maximum gage height, 24.57 ft (7.489 m) May 6, backwater from ice; minimum daily discharge, 1,100 ft^3/s (31.1 m^3/s) Mar. 16 to Apr. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12600	3000	1800	1300	1200	1200	1100	2300	81300	41200	30400	25600
2	11800	3000	1800	1300	1200	1200	1100	3000	90200	40800	26200	24400
3	10600	3000	1800	1300	1200	1200	1100	3500	88600	39400	25000	22300
4	10200	3000	1800	1300	1200	1200	1100	4000	71300	38400	24100	21000
5	9470	3000	1800	1300	1200	1200	1100	5000	62000	34200	25300	19800
6	9110	2700	1700	1300	1200	1200	1100	6000	71300	29200	24700	18800
7	9110	2700	1700	1300	1200	1200	1100	8000	109000	26500	22900	17800
8	8750	2700	1700	1300	1200	1200	1100	10000	109000	25600	22000	16800
9	8750	2700	1700	1300	1200	1200	1100	13000	78800	24700	26200	15800
10	9110	2700	1700	1300	1200	1200	1100	18000	70300	28300	31400	15000
11	10600	2500	1500	1300	1200	1200	1100	25000	49900	37700	31000	14000
12	11800	2500	1500	1300	1200	1200	1100	35000	39400	47100	28900	13600
13	12600	2500	1500	1300	1200	1200	1100	50000	51500	45100	27100	13400
14	12000	2500	1500	1300	1200	1200	1100	71300	57500	49500	24700	12800
15	9500	2500	1500	1300	1200	1200	1100	77300	49100	51100	22900	12600
16	8000	2300	1400	1300	1200	1100	1100	79800	43900	45500	22600	13200
17	7400	2300	1400	1300	1200	1100	1100	81800	43500	42200	28600	14800
18	6800	2300	1400	1300	1200	1100	1100	83000	45500	37400	36300	17800
19	5600	2300	1400	1300	1200	1100	1100	84000	45900	32400	37000	18300
20	5000	2300	1400	1300	1200	1100	1100	86000	47500	28900	36600	17600
21	4800	2100	1400	1300	1200	1100	1100	85300	51500	26200	33200	16000
22	4500	2100	1400	1300	1200	1100	1200	72800	50300	23500	29500	14800
23	4400	2100	1400	1300	1200	1100	1200	60000	59300	21300	25900	13200
24	4200	2100	1400	1300	1200	1100	1300	45000	57000	19600	23200	11200
25	4000	2100	1400	1300	1200	1100	1300	34600	47900	18300	21000	9830
26	3800	1900	1300	1300	1200	1100	1400	36000	41900	17300	19600	9290
27	3600	1900	1300	1300	1200	1100	1500	43900	37700	16800	18600	20000
28	3500	1900	1300	1300	1200	1100	1700	79300	36300	16300	17600	31800
29	3400	1900	1300	1300	1200	1100	1800	104000	35200	17600	16800	32400
30	3300	1900	1300	1300	---	1100	2100	103000	37400	22900	16800	32400
31	3200	---	1300	1300	---	1100	---	89200	---	31400	18800	---
TOTAL	231500	72500	46800	40300	34800	35600	36600	1499100	1760000	976400	794900	536320
MEAN	7468	2417	1510	1300	1200	1148	1220	48360	58670	31500	25640	17880
MAX	12600	3000	1600	1300	1200	1200	2100	104000	109000	51100	37000	32400
MIN	3200	1900	1300	1300	1200	1100	1100	2300	35200	16300	16800	9290
CFSM	.40	.13	.08	.07	.06	.06	.07	2.59	3.14	1.68	1.37	.96
IN.	.46	.14	.09	.08	.07	.07	.07	2.98	3.50	1.94	1.58	1.07
AC-FT	459200	143800	92830	79940	69030	70610	72600	2973000	3491000	1937000	1577000	1064000

CAL YR 1979 TOTAL 4523500 MEAN 12390 MAX 91000 MIN 520 CFSM .66 IN 9.00 AC-FT 8972000
WTR YR 1980 TOTAL 6064820 MEAN 16570 MAX 109000 MIN 1100 CFSM .89 IN 12.06 AC-FT 12030000

15565235 OPHIR CREEK NEAR TAKOTNA

LOCATION.--Lat 63°08'42", long 156°31'15", in SE¼SW¼ sec.14, T.27 S., R.12 E., Hydrologic Unit 19030006, on right bank 25 ft (7.6 m) downstream from road crossing between airstrip and old town of Ophir, 500 ft (150 m) upstream from mouth, and 20 mi (32 km) northwest of Takotna.

DRAINAGE AREA.--6.19 mi^2 (16.03 km^2).

PERIOD OF RECORD.--August 1975 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (177 m), from topographic map.

REMARKS.--Records poor during period of no gage-height record prior to May 13, fair thereafter.

AVERAGE DISCHARGE.--5 years, 3.71 ft^3/s (0.105 m^3/s), 8.14 in/yr (207 mm/yr), 2,690 acre-ft/yr (3.32 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 360 ft^3/s (10.2 m^3/s) May 18, 1977, gage height, 4.70 ft (1.433 m), from rating curve extended above 13 ft^3/s (0.4 m^3/s) on basis of slope-conveyance study; no flow at times during most winter months.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 57 ft^3/s (1.63 m^3/s) June 7, gage height, 2.67 ft (0.814 m) from rating curve extended as explained above; minimum daily, about 0.5 ft^3/s (0.14 m^3/s) Jan. 17 to Apr. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	2.1	1.0	.60	.50	.50	.50	17	11	12	8.7	7.6
2	5.5	2.1	.90	.60	.50	.50	.50	18	12	11	8.4	7.4
3	5.5	2.1	.90	.60	.50	.50	.50	18	17	11	7.9	7.6
4	5.5	2.1	.90	.60	.50	.50	.50	18	12	12	7.4	8.4
5	5.0	2.1	.90	.60	.50	.50	.50	17	9.8	12	7.2	8.4
6	4.5	2.3	.80	.60	.50	.50	.50	16	21	12	7.4	8.4
7	5.5	2.7	.80	.60	.50	.50	.50	15	42	11	7.6	8.2
8	11	3.6	.80	.60	.50	.50	.50	14	20	11	9.3	7.6
9	9.0	6.0	.80	.60	.50	.50	.50	14	16	10	11	7.4
10	6.5	5.5	.80	.60	.50	.50	.50	13	14	10	11	6.9
11	5.5	4.0	.80	.60	.50	.50	.50	14	15	13	10	6.7
12	5.0	3.2	.70	.60	.50	.50	.50	14	14	14	9.6	6.8
13	4.5	2.8	.70	.60	.50	.50	.50	14	12	12	9.0	7.2
14	4.0	2.4	.70	.60	.50	.50	.50	13	11	11	8.7	7.4
15	4.0	2.2	.70	.60	.50	.50	.50	12	10	11	8.7	8.4
16	3.6	2.0	.70	.60	.50	.50	.50	9.6	9.8	13	11	8.4
17	3.4	1.9	.70	.50	.50	.50	.50	8.7	9.3	12	12	8.2
18	3.3	1.7	.70	.50	.50	.50	.50	7.9	8.7	11	14	7.9
19	3.1	1.5	.70	.50	.50	.50	.60	7.2	8.4	9.8	13	7.6
20	3.0	1.4	.70	.50	.50	.50	.60	6.7	19	9.3	12	7.4
21	2.9	1.4	.70	.50	.50	.50	.70	6.5	17	8.7	12	7.4
22	2.7	1.3	.70	.50	.50	.50	.80	6.1	12	8.2	11	7.2
23	2.6	1.3	.70	.50	.50	.50	1.0	5.8	11	7.6	10	6.7
24	2.5	1.2	.70	.50	.50	.50	1.5	5.8	9.8	7.4	9.6	6.3
25	2.4	1.2	.70	.50	.50	.50	2.5	5.6	12	7.2	9.0	6.1
26	2.3	1.2	.70	.50	.50	.50	7.0	5.6	14	7.2	8.7	5.8
27	2.3	1.1	.70	.50	.50	.50	11	5.4	12	11	8.2	6.1
28	2.2	1.1	.60	.50	.50	.50	14	5.8	16	11	7.9	6.1
29	2.2	1.0	.60	.50	.50	.50	15	6.1	15	10	7.6	5.8
30	2.1	1.0	.60	.50	---	.50	16	6.5	13	9.6	7.6	5.8
31	2.1	---	.60	.50	---	.50	---	8.7	---	9.3	7.6	---
TOTAL	129.5	65.5	23.00	17.10	14.50	15.50	79.70	335.0	423.8	325.3	293.1	217.2
MEAN	4.18	2.18	.74	.55	.50	.50	2.66	10.8	14.1	10.5	9.45	7.24
MAX	11	6.0	1.0	.60	.50	.50	16	18	42	14	14	8.4
MIN	2.1	1.0	.60	.50	.50	.50	.50	5.4	8.4	7.2	7.2	5.8
CFSM	.68	.35	.12	.09	.08	.08	.43	1.75	2.28	1.70	1.53	1.17
IN.	.78	.39	.14	.10	.09	.09	.48	2.01	2.55	1.95	1.76	1.31
AC-FT	257	130	46	34	29	31	158	664	841	645	581	431

CAL YR 1979 TOTAL 1378.30 MEAN 3.78 MAX 20 MIN .00 CFSM .61 IN 8.28 AC-FT 2730
WTR YR 1980 TOTAL 1939.20 MEAN 5.30 MAX 42 MIN .50 CFSM .86 IN 11.65 AC-FT 3850

15565447 YUKON RIVER AT PILOT STATION

(National stream-quality accounting, pesticide, and radiochemical networks station)

LOCATION.--Lat 61°56'04", long 162°52'50", in SW¼SE¼ sec.5, T.21 N., R.74 W., Hydrologic Unit 19030006, on right bank 0.2 mi (0.3 km) downstream from village of Pilot Station, 2.4 mi (3.9 km) downstream from Atchuelinguk River, and 19 mi (31 km) upstream from Andreafsky River.

DRAINAGE AREA.--321,000 mi^2 (831,000 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map.

REMARKS.-Records poor for periods of no gage-height record prior to June 25, fair thereafter.

AVERAGE DISCHARGE.--5 years, 213,900 ft^3/s (6,055 m^3/s), 9.04 in/yr (230 mm/yr), 154,900,000 acre-ft/yr (191 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 700,000 ft^3/s (20,000 m^3/s) May 23, 1976; maximum gage height, 30.2 ft (9.20 m) about May 23, 1976, from floodmarks, backwater from ice; minimum daily discharge, about 37,000 ft^3/s (1,000 m^3/s) Apr. 11-26, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 660,000 ft^3/s (19,000 m^3/s), about May 30; minimum daily, about 50,000 ft^3/s (1,420 m^3/s) Mar. 26 to Apr. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270000	170000	90000	70000	65000	60000	50000	65000	640000	537000	400000	427000
2	265000	165000	90000	70000	65000	60000	50000	65000	620000	532000	400000	428000
3	265000	160000	90000	70000	65000	60000	50000	70000	620000	528000	400000	425000
4	260000	155000	90000	70000	65000	60000	50000	75000	620000	521000	400000	421000
5	260000	150000	85000	70000	65000	60000	50000	80000	620000	514000	400000	416000
6	255000	145000	85000	70000	60000	60000	50000	88000	620000	507000	400000	411000
7	250000	140000	85000	70000	60000	60000	50000	97000	620000	500000	400000	404000
8	250000	140000	85000	70000	60000	60000	50000	105000	620000	494000	400000	397000
9	250000	135000	80000	70000	60000	60000	50000	120000	610000	487000	400000	390000
10	245000	130000	80000	70000	60000	60000	50000	130000	610000	481000	400000	383000
11	245000	130000	80000	70000	60000	60000	50000	150000	610000	477000	400000	378000
12	245000	130000	80000	70000	60000	60000	50000	180000	610000	474000	397000	371000
13	245000	125000	80000	70000	60000	60000	50000	210000	600000	469000	400000	366000
14	255000	125000	80000	70000	60000	60000	50000	250000	580000	463000	403000	365000
15	245000	120000	80000	70000	60000	60000	50000	320000	580000	456000	406000	360000
16	245000	120000	75000	70000	60000	56000	50000	380000	570000	449000	407000	355000
17	240000	115000	75000	65000	60000	56000	50000	520000	570000	441000	410000	351000
18	240000	115000	75000	65000	60000	56000	50000	540000	570000	435000	413000	344000
19	240000	110000	75000	65000	60000	56000	50000	560000	570000	431000	414000	338000
20	235000	110000	75000	65000	60000	56000	50000	560000	560000	427000	414000	330000
21	230000	110000	75000	65000	60000	56000	50000	570000	560000	425000	415000	321000
22	225000	110000	75000	65000	60000	56000	50000	560000	560000	424000	414000	316000
23	220000	100000	75000	65000	60000	56000	50000	540000	560000	422000	413000	312000
24	215000	100000	75000	65000	60000	56000	50000	540000	550000	421000	411000	309000
25	210000	100000	75000	65000	60000	56000	50000	560000	549000	417000	409000	306000
26	200000	100000	75000	65000	60000	50000	50000	580000	549000	414000	408000	307000
27	195000	95000	70000	65000	60000	50000	55000	600000	549000	413000	410000	307000
28	190000	95000	70000	65000	60000	50000	56000	620000	548000	412000	413000	314000
29	185000	90000	70000	65000	60000	50000	58000	640000	545000	411000	416000	321000
30	180000	90000	70000	65000	---	50000	60000	660000	542000	410000	421000	325000
31	175000	---	70000	65000	---	50000	---	640000	---	400000	424000	---
TOTAL	7230000	3680000	2435000	2095000	1765000	1760000	1529000	11075000	17532000	14192000	12618000	10798000
MEAN	233200	122700	78550	67580	60860	56770	50970	357300	584400	457800	407000	359900
MAX	270000	170000	90000	70000	65000	60000	60000	660000	640000	537000	424000	428000
MIN	175000	90000	70000	65000	60000	50000	50000	65000	542000	400000	397000	306000
CFSM	.73	.38	.25	.21	.19	.18	.16	1.11	1.82	1.43	1.27	1.12
IN.	.84	.43	.28	.24	.20	.20	.18	1.28	2.03	1.64	1.46	1.25
AC-FT	14340000	7299000	4830000	4155000	3501000	3491000	3033000	21970000	34770000	28150000	25030000	21420000

CAL YR 1979 TOTAL 84794000 MEAN 232300 MAX 580000 MIN 40000 CFSM .72 IN 9.83 AC-FT 168200000
WTR YR 1980 TOTAL 86709000 MEAN 236900 MAX 660000 MIN 50000 CFSM .74 IN 10.05 AC-FT 172000000

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-56, 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	PER- CENT OF TOTAL DEPTH	STREAM VELOC- ITY, POINT (FPS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)
OCT								
14...	1801	700	--	29.0	--	2.60	210	--
14...	1806	1200	--	36.0	--	3.20	215	--
14...	1807	1200	.3	36.0	--	--	212	7.8
14...	1808	1200	7.2	36.0	20	3.60	212	--
14...	1809	1200	22.0	36.0	60	--	212	--
14...	1810	1200	29.0	36.0	80	2.80	213	--
14...	1811	1300	--	39.0	--	3.50	210	--
14...	1812	1300	.3	39.0	--	--	209	7.7
14...	1816	1600	--	47.0	--	2.20	210	--
14...	1817	1600	.3	47.0	--	--	211	7.7
14...	1821	1750	--	51.0	--	E3.10	211	--
14...	1822	1750	.3	51.0	--	--	211	7.7
14...	1826	1950	--	52.0	--	E3.00	212	--
14...	1827	1950	.3	52.0	--	--	205	7.8
14...	1828	1950	10.0	52.0	20	E2.90	215	--
14...	1829	1950	31.0	52.0	60	--	210	--
14...	1830	1950	42.0	52.0	80	E3.20	218	--
14...	1831	2100	--	60.0	--	2.90	211	--
14...	1832	2100	.3	60.0	--	--	212	7.7
14...	1836	2250	--	63.0	--	3.80	210	--
14...	1837	2250	.3	63.0	--	--	212	7.7
14...	1841	2350	--	60.0	--	2.60	210	--
14...	1842	2350	.3	60.0	--	--	205	7.7
14...	1843	2350	12.0	60.0	20	2.70	212	--
14...	1844	2350	36.0	60.0	60	--	210	--
14...	1845	2350	48.0	60.0	80	2.50	210	--
14...	1846	2500	--	33.0	--	E2.50	206	--
14...	1847	2500	.3	33.0	--	--	210	7.7

DATE	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT								
14...	--	--	--	100	25	--	--	3100
14...	--	--	--	102	25	104	87	3100
14...	5.0	12.0	95	--	--	--	--	--
14...	--	--	--	101	25	106	89	3600
14...	--	--	--	99	25	126	84	3400
14...	--	--	--	100	25	156	84	3800
14...	--	--	--	99	25	--	--	3300
14...	4.7	12.0	95	--	--	--	--	--
14...	--	--	--	100	25	--	--	3200
14...	4.6	12.0	95	--	--	--	--	--
14...	--	--	--	100	25	--	--	2800
14...	4.5	12.0	95	--	--	--	--	--
14...	--	--	--	102	25	83	89	3100
14...	5.1	12.0	95	--	--	--	--	--
14...	--	--	--	102	25	94	90	2600
14...	--	--	--	99	25	89	90	2900
14...	--	--	--	101	10	89	85	6200
14...	--	--	--	101	25	--	--	2800
14...	4.6	12.0	95	--	--	--	--	--
14...	--	--	--	101	25	--	--	2500
14...	4.7	12.0	95	--	--	--	--	--
14...	--	--	--	101	25	49	91	2400
14...	5.1	12.0	95	--	--	--	--	--
14...	--	--	--	101	25	85	96	2100
14...	--	--	--	100	24	68	92	2800
14...	--	--	--	101	25	67	92	2600
14...	--	--	--	100	25	--	--	2800
14...	4.7	12.0	95	--	--	--	--	--

E ESTIMATED

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	PER-CENT OF TOTAL DEPTH	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)
MAR							
25...	1231	1975	--	47.0	--	315	7.2
25...	1232	1975	9.0	47.0	20	--	--
25...	1233	1975	28.0	47.0	60	--	--
25...	1234	1975	38.0	47.0	80	--	--
25...	1236	1550	--	50.0	--	300	7.1
25...	1237	1550	10.0	50.0	20	--	--
25...	1238	1550	30.0	50.0	60	--	--
25...	1239	1550	40.0	50.0	80	--	--
25...	1241	1250	--	43.0	--	300	7.1
25...	1242	1250	9.0	43.0	20	--	--
25...	1243	1250	26.0	43.0	60	--	--
25...	1244	1250	34.0	43.0	80	--	--
25...	1246	950	--	34.0	--	300	7.2
25...	1247	950	6.8	34.0	20	--	--
25...	1248	950	21.0	34.0	60	--	--
25...	1249	950	27.0	34.0	80	--	--
25...	1251	500	--	25.0	--	302	7.2
25...	1252	500	5.0	25.0	20	--	--
25...	1253	500	15.0	25.0	60	--	--
25...	1254	500	20.0	25.0	80	--	--

DATE	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
MAR							
25...	--	2.6	18	171	0	21	1300
25...	.5	--	--	--	--	--	--
25...	.5	--	--	--	--	--	--
25...	.5	--	--	--	--	--	--
25...	--	2.7	19	172	0	21	1300
25...	.6	--	--	--	--	--	--
25...	.5	--	--	--	--	--	--
25...	.5	--	--	--	--	--	--
25...	--	2.8	20	172	0	20	1400
25...	.3	--	--	--	--	--	--
25...	.4	--	--	--	--	--	--
25...	.5	--	--	--	--	--	--
25...	--	3.3	23	174	0	21	1400
25...	.2	--	--	--	--	--	--
25...	.2	--	--	--	--	--	--
25...	.2	--	--	--	--	--	--
25...	--	2.2	15	175	0	20	1900
25...	.2	--	--	--	--	--	--
25...	.2	--	--	--	--	--	--
25...	.2	--	--	--	--	--	--

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
JUL							
07...	1731	789	185	7.6	14.5	--	--
07...	1732	1943	180	7.6	14.5	--	--
07...	1733	2410	175	7.4	14.4	--	--
AUG							
12...	1401	2300	198	7.5	15.1	9.2	91
12...	1402	1900	205	7.5	15.2	9.2	91
12...	1403	900	205	7.5	15.2	9.3	92

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 14...	1800	2375	253000	215	--	27	751	--	--	100	25
MAR 25...	1230	2150	56100	--	--	6.0	746	<1	<1	160	26
JUL 07...	1730	2723	492000	179	7.6	42	--	K1	<1	81	15
AUG 12...	1400	E2600	395000	205	7.5	270	762	K8	K3	96	23

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 14...	30	7.2	2.9	1.1	100	0	25	1.0	.1	8.4
MAR 25...	46	10	3.5	1.5	173	0	20	.8	.1	12
JUL 07...	24	5.2	2.0	.7	61	0	19	.9	.2	5.8
AUG 12...	28	6.4	2.6	1.4	101	0	25	.9	.2	6.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)
OCT 14...	124	125	.12	.07	.020	.000	.77	.30	.79	.49
MAR 25...	182	173	.23	.22	.130	.150	.40	.20	.53	.18
JUL 07...	117	98	.06	.06	.040	.010	.86	.52	.90	.37
AUG 12...	126	116	.10	.04	.040	.000	.79	.42	.83	.41

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 14...	.30	.91	.37	.090	.010	6.6	.8	89	60800	90
MAR 25...	.35	.76	.57	.020	.010	6.0	.2	5	757	--
JUL 07...	.53	.96	.59	.180	.030	13	--	--	--	--
AUG 12...	.42	.93	.46	.370	.020	9.3	--	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT 14...	1800	3	1	2	300	0	400	1	1	0	10
MAR 25...	1230	2	1	1	200	100	90	0	0	<1	30
JUL 07...	1730	2	0	2	100	50	50	0	0	2	10
AUG 12...	1400	7	5	2	200	100	60	1	0	1	30

K NON-IDEAL COLONY COUNT

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 14...	10	0	3	3	0	12	8	4	180	0	340
MAR 25...	30	0	1	0	<3	1	0	1	1300	1300	50
JUL 07...	0	20	1	--	<3	3	0	3	4600	4400	250
AUG 12...	30	0	9	--	<3	43	39	4	16000	16000	60

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
OCT 14...	59	57	2	90	70	20	.1	.1	.0	9	6
MAR 25...	0	0	0	120	10	110	.0	.0	.0	0	0
JUL 07...	2	2	0	120	110	7	.0	.0	.0	0	0
AUG 12...	44	41	3	380	380	5	.1	.1	.0	22	19

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 14...	3	1	1	0	0	0	0	0	0	10
MAR 25...	2	0	0	0	0	0	0	20	20	4
JUL 07...	3	0	0	0	0	0	0	50	40	10
AUG 12...	3	1	1	0	0	0	0	110	--	<3

DATE	TIME	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)
OCT 14...	1800	<1.7	<1.2	<1.2	<.8	1.4	1.8
MAR 25...	1230	<3.2	<.4	<2.2	<.3	1.5	<.4
JUL 07...	1730	--	--	--	--	--	--

DATE	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	TRITIUM IN WATER MOLECULES (TU)	TRITIUM WATER MOLECULES COUNT ERROR (TU)
OCT 14...	1.4	1.8	.08	.90	85.1	5.6
MAR 25...	1.6	<.4	.06	.74	85.1	3.9
JUL 07...	--	--	--	--	72.6	4.2

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	PCB TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)
MAR 25...	1230	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUL 07...	1730	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)
MAR 25...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUL 07...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	OCT 14,79	MAR 25,80	JUL 7,80	AUG 12,80
TIME	1800	1230	1730	1400
TOTAL CELLS/ML	170	26	230	690
DIVERSITY: DIVISION	1.4	1.0	0.0	1.0
.CLASS	1.4	1.0	0.0	1.1
..ORDER	1.9	1.0	0.0	1.4
...FAMILY	2.3	1.0	0.0	2.0
....GENUS	2.3	1.0	0.0	2.9

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	29#	17	--	-	--	-	240#	35
....DICTYOSPHAERIUM	--	-	--	-	--	-	120#	17
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	--	-	--	-	58	8
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	13#	50	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	29#	17	--	-	--	-	29	4
....MELOSIRA	--	-	--	-	--	-	58	8
....STEPHANODISCUS	--	-	--	-	--	-	14	2
..PENNALES								
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	14	2
...FRAGILARIACEAE								
....ASTERIONELLA	43#	25	--	-	--	-	58	8
....SYNEDRA	--	-	13#	50	--	-	58	8
...NITZSCHIACEAE								
....NITZSCHIA	29#	17	--	-	--	-	29	4
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...CHROMULINACEAE								
....CHRYSOCOCCUS	--	-	--	-	--	-	14	2
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	43#	25	--	-	--	-	--	-
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	230#	100	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

ND MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED

15621000 SNAKE RIVER NEAR NOME

LOCATION.--Lat 64°33'51", long 165°30'26", in SE¼ sec.5, T.11 S., R.34 W., Hydrologic Unit 19020002, on downstream side of bridge on Nome-Teller Highway, 5.4 mi (8.7 km) northwest of Nome.

DRAINAGE AREA.--85.7 mi² (222 km²), approximately.

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Nonrecording gage. Datum of gage is 8.58 ft (2.615 m) National Geodetic Vertical Datum of 1929 (USC&GS data furnished by Alaska Department of Transportation, Nome). Apr. 25, 1968 to July 11, 1979, water-stage recorder at same site and datum.

REMARKS.--Records fair except those for Oct. 17 to May 23, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years, 184 ft³/s (5.211 m³/s), 29.16 in/yr (741 mm/yr), 133,000 acre-ft/yr (164 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,200 ft³/s (119 m³/s) June 2, 1966, gage height, 11.90 ft (3.627 m); maximum gage height, 13.59 ft (4.142 m) May 15, 1975, backwater from ice; minimum daily discharge, about 1.0 ft³/s (0.03 m³/s) Feb. 25 to May 15, 1971, but may be no flow at times during some winters.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,310 ft³/s (65.4 m³/s) June 21, gage height, 9.85 ft (3.002 m); minimum daily, about 35 ft³/s (1.0 m³/s) Apr. 10-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	412	95	62	50	41	38	36	41	644	340	144	102
2	392	95	62	50	41	38	36	41	956	382	140	99
3	378	95	60	48	41	38	36	41	924	340	136	96
4	360	95	60	48	41	38	36	43	924	318	128	96
5	352	100	60	48	41	38	36	44	776	438	138	94
6	330	100	55	48	41	38	36	45	560	503	148	93
7	312	110	55	48	41	38	36	46	435	415	176	90
8	300	100	55	48	41	38	36	49	503	385	148	89
9	292	95	55	48	41	37	36	52	976	355	140	86
10	296	90	55	48	41	37	35	56	1080	345	150	85
11	294	90	55	48	41	37	35	60	1120	322	150	85
12	278	85	55	46	41	37	35	66	665	302	152	90
13	268	80	55	46	41	37	35	72	527	290	156	99
14	258	80	55	46	40	37	35	80	455	278	146	93
15	246	80	55	46	40	37	35	90	430	278	146	87
16	236	75	55	44	40	37	35	100	412	248	142	86
17	220	75	55	44	40	37	35	120	676	240	135	85
18	200	75	55	44	40	37	35	140	634	226	130	82
19	190	70	55	44	39	37	35	170	792	214	132	82
20	180	70	50	44	39	37	35	200	1770	202	132	81
21	170	70	50	44	39	37	36	270	1380	192	124	81
22	150	70	50	44	39	37	36	350	740	186	122	79
23	140	70	50	44	38	36	36	450	620	176	122	79
24	130	70	50	44	38	36	38	686	574	168	122	76
25	120	70	50	44	38	36	38	884	530	164	118	76
26	120	70	50	41	38	36	38	1420	476	232	116	78
27	110	65	50	41	38	36	38	1420	445	244	116	97
28	100	65	50	41	38	36	40	1040	400	176	110	100
29	100	65	50	41	38	36	40	804	355	156	104	92
30	95	62	50	41	---	36	40	712	345	150	102	85
31	95	---	50	41	---	36	---	602	---	156	106	---
TOTAL	7124	2432	1674	1402	1155	1146	1089	10194	21124	8421	4131	2643
MEAN	230	81.1	54.0	45.2	39.8	37.0	36.3	329	704	272	133	88.1
MAX	412	110	62	50	41	38	40	1420	1770	503	176	102
MIN	95	62	50	41	38	36	35	41	345	150	102	76
CFSM	2.68	.95	.63	.53	.46	.43	.42	3.84	8.22	3.17	1.55	1.03
IN.	3.09	1.06	.73	.61	.50	.50	.47	4.42	9.17	3.66	1.79	1.15
AC-FT	14130	4820	3320	2780	2290	2270	2160	20220	41900	16700	8190	5240

CAL YR 1979 TOTAL 97854 MEAN 268 MAX 2000 MIN 40 CFSM 3.13 IN 42.48 AC-FT 194100
WTR YR 1980 TOTAL 62535 MEAN 171 MAX 1770 MIN 35 CFSM 2.00 IN 27.14 AC-FT 124000

NOTE.--No gage-height record Oct. 23 to May 23.

15668200 CRATER CREEK NEAR NOME

LOCATION.--Lat 64°55'48", long 164°52'12", in NW¼NW¼ sec.36, T.6 S., R.31 W., Hydrologic Unit 19020002, on right bank 15 ft (5 m) upstream from culvert at mile 43 (69 km) on Nome-Kougarok Highway, 1.1 mi (1.8 km) upstream from mouth, and 34 mi (55 km) northeast of Nome.

DRAINAGE AREA.--21.9 mi^2 (56.7 km^2).

PERIOD OF RECORD.--Annual maximum, water years 1964-65, 1967-75. August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (150 m), from topographic map. Sept. 18, 1964 to Aug. 29, 1975, crest-stage gage at same site and datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 24 to June 10, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 59.3 ft^3/s (1.679 m^3/s), 36.77 in/yr (934 mm/yr), 42,960 acre-ft/yr (53.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,540 ft^3/s (71.9 m^3/s) July 10, 1975, gage height, 19.71 ft (6.008 m) from floodmarks, road and culvert washed out, from slope-area measurement of peak flow; no flow Apr. 11-25, 1978 and Mar. 10 to Apr. 30, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,250 ft^3/s (63.7 m^3/s) June 19, gage height, 15.60 ft (4.755 m); no flow Mar. 10 to Apr. 30.

Peak discharges above base of 550 ft^3/s (16 m^3/s) for the period of daily record were computed and are shown below. Annual maximums (*) are also shown.

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 29, 1976		*502	14.2	*11.54	3.517
June 15, 1977	2100	637	18.0	12.49	3.807
Sept. 7, 1977	2400	*1,080	30.6	*13.65	4.161
Sept.14, 1977	0300	918	26.0	13.27	4.045
June 4, 1978	0800	1,040	29.4	13.58	4.139
June 15, 1978	2100	577	16.3	12.29	3.746
June 22, 1978	0700	*1,240	35.1	*13.97	4.258
Sept.25, 1978	0230	590	16.4	12.32	3.755
June 18, 1979	2400	1,060	30.0	13.62	4.151
June 24, 1979	2300	846	24.0	13.17	4.014
July 3, 1979	1130	*1,240	35.1	*13.98	4.261
Aug. 4, 1979	1100	922	26.1	13.28	4.048
Aug. 19, 1979	1600	634	18.0	12.48	3.804
Aug. 26, 1979	0130	950	26.9	13.35	4.069
June 10, 1980	1830	604	17.1	12.38	3.774
June 17, 1980	1000	592	16.8	12.34	3.762
June 19, 1980	2400	*2,250	63.7	*15.60	4.755
July 2, 1980	0500	556	15.7	12.22	3.726
July 5, 1980	2000	914	25.9	13.26	4.043

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	35	6.0	2.0	.50	.50	.00	.50	25	223	65	22
2	71	37	6.0	2.0	.50	.50	.00	.50	28	485	66	20
3	75	37	5.5	2.0	.50	.50	.00	.50	50	306	64	20
4	76	37	5.5	2.0	.50	.50	.00	.50	88	179	74	19
5	72	37	5.0	1.5	.50	.50	.00	1.0	52	442	121	18
6	68	37	5.0	1.5	.50	.50	.00	1.5	45	562	137	17
7	64	35	4.5	1.5	.50	.50	.00	2.0	50	270	142	17
8	62	35	4.5	1.5	.50	.50	.00	2.5	120	216	130	17
9	61	30	4.5	1.5	.50	.50	.00	3.0	260	184	108	17
10	57	30	4.5	1.5	.50	.00	.00	3.5	544	171	119	16
11	58	28	4.0	1.5	.50	.00	.00	4.0	402	250	125	16
12	58	26	4.0	1.5	.50	.00	.00	5.0	144	219	108	16
13	56	24	4.0	1.5	.50	.00	.00	6.0	106	174	104	41
14	51	22	4.0	1.5	.50	.00	.00	8.0	108	143	95	26
15	45	20	4.0	1.5	.50	.00	.00	9.0	132	131	84	24
16	40	18	3.5	1.0	.50	.00	.00	11	217	125	77	23
17	35	16	3.5	1.0	.50	.00	.00	14	523	122	71	21
18	30	15	3.5	1.0	.50	.00	.00	17	308	127	66	20
19	28	14	3.5	1.0	.50	.00	.00	23	808	143	62	19
20	28	13	3.5	1.0	.50	.00	.00	28	1110	137	60	18
21	21	12	3.0	1.0	.50	.00	.00	35	307	120	55	18
22	21	11	3.0	1.0	.50	.00	.00	40	174	123	48	17
23	21	10	3.0	1.0	.50	.00	.00	50	182	115	40	17
24	24	9.5	3.0	1.0	.50	.00	.00	56	286	107	36	16
25	26	9.0	3.0	1.0	.50	.00	.00	60	350	100	30	16
26	30	8.5	2.5	1.0	.50	.00	.00	60	270	96	26	17
27	30	8.0	2.5	1.0	.50	.00	.00	50	234	122	24	19
28	30	7.5	2.5	1.0	.50	.00	.00	40	203	109	24	18
29	30	7.0	2.5	1.0	.50	.00	.00	30	183	94	24	16
30	32	6.5	2.5	1.0	---	.00	.00	25	168	78	24	17
31	35	---	2.5	1.0	---	.00	---	21	---	69	30	---
TOTAL	1410	635.0	118.5	40.5	14.50	4.50	.00	607.50	7477	5742	2239	578
MEAN	45.5	21.2	3.82	1.31	.50	.15	.000	19.6	249	185	72.2	19.3
MAX	76	37	6.0	2.0	.50	.50	.00	60	1110	562	142	41
MIN	21	6.5	2.5	1.0	.50	.00	.00	.50	25	69	24	16
CFSM	2.08	.97	.17	.06	.02	.007	.000	.90	11.4	8.45	3.30	.88
IN.	2.39	1.08	.20	.07	.02	.01	.00	1.03	12.70	9.75	3.80	.98
AC-FT	2800	1260	235	80	29	8.9	.00	1200	14830	11390	4440	1150

CAL YR 1979 TOTAL 33902.50 MEAN 92.9 MAX 931 MIN 2.0 CFSM 4.24 IN 57.59 AC-FT 67250
WTR YR 1980 TOTAL 18866.50 MEAN 51.5 MAX 1110 MIN .00 CFSM 2.35 IN 32.05 AC-FT 37420

15744500 KOBUK RIVER NEAR KIANA
(National stream-quality accounting network station)

LOCATION.--Lat 66°58'25", long 160°07'51", in NW¼SE¼ sec.11, T.18 N., R.7 W., Hydrologic Unit 19020001, on left bank 5.8 mi (9.3 km) upstream from Portage Creek, 9.7 mi (15.6 km) upstream from Squirrel River, and 9.8 mi (15.8 km) upstream from Kiana.

DRAINAGE AREA.--9,520 mi^2 (24,660 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 35 ft (10.7 m), from topographic map.

REMARKS.--Records poor. Revision of records for September 1976 through current year may be required upon further definition of stage-discharge relation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 93,800 ft^3/s (2,660 m^3/s) June 12, 1979, gage height, 55.75 ft (16.993 m), from rating curve extended above 60,000 ft^3/s (1,700 m^3/s), minimum daily, 1,600 ft^3/s (45 m^3/s) Apr. 1-22, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 91,800 ft^3/s (2,600 m^3/s) about June 7, gage height, 54.86 ft (16.721 m) from floodmarks, from rating curve extended above 70,000 ft^3/s (1,980 m^3/s); minimum daily, 2,600 ft^3/s (74 m^3/s) Mar. 1 to Apr. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25000	5600	3000	2800	2700	2600	2600	8000	80000	40000	22000	20600
2	23000	5400	3000	2800	2700	2600	2600	9000	76000	42000	21000	23600
3	22000	5200	3000	2800	2700	2600	2600	10000	70000	41000	20000	23800
4	20800	5000	3000	2800	2700	2600	2600	11000	72000	40000	19000	22700
5	20100	4800	3000	2800	2700	2600	2600	13000	78000	40000	18000	21400
6	19200	4700	3000	2800	2700	2600	2600	15000	84000	39000	18000	20400
7	18400	4500	3000	2800	2700	2600	2700	17000	90000	38000	19000	19500
8	17800	4400	3000	2800	2700	2600	2700	20000	84000	38000	20000	18700
9	17400	4300	3000	2800	2700	2600	2700	25000	76000	39000	21000	18200
10	17300	4200	3000	2800	2700	2600	2700	30000	70100	40000	20000	17300
11	17700	4100	3000	2800	2700	2600	2800	38000	70500	42000	19000	16400
12	18300	3900	3000	2800	2700	2600	2800	46000	77200	46000	19000	15800
13	18300	3900	3000	2800	2700	2600	2900	56000	72800	52000	19000	15000
14	18300	3800	3000	2800	2700	2600	3000	66000	66200	58000	18000	14500
15	16200	3700	2900	2800	2700	2600	3000	72000	64500	62000	18000	14300
16	15000	3700	2900	2800	2700	2600	3200	76000	61300	60000	18000	14000
17	14000	3600	2900	2800	2700	2600	3300	80000	58800	60000	17000	13600
18	13000	3500	2900	2800	2700	2600	3400	78000	55700	64000	17000	13600
19	11000	3500	2900	2800	2700	2600	3500	74000	53300	56000	16000	13800
20	10000	3400	2900	2800	2700	2600	3700	68000	52900	48000	16000	13300
21	9400	3400	2900	2800	2700	2600	3900	60000	62300	40000	15000	12900
22	8800	3300	2900	2800	2700	2600	4100	58000	61700	34000	14800	12300
23	8200	3300	2900	2800	2700	2600	4400	54000	56200	30000	14200	11900
24	7800	3200	2900	2800	2700	2600	4600	52000	53500	27000	13700	11700
25	7400	3200	2900	2800	2700	2600	4900	50000	51400	25000	13500	10900
26	7000	3200	2900	2800	2700	2600	5300	52000	48000	23000	13300	10500
27	6600	3100	2900	2800	2700	2600	5700	54000	45300	24000	13200	10400
28	6400	3100	2900	2800	2700	2600	6200	58000	42700	24000	13600	9900
29	6200	3100	2900	2800	2700	2600	6700	64000	42000	25000	14600	9400
30	6000	3100	2900	2800	---	2600	7300	68000	41000	24000	16200	9000
31	5800	---	2900	2800	---	2600	---	72000	---	23000	18400	---
TOTAL	432400	117200	91300	86800	78300	80600	111100	1454000	1917400	1244000	535500	459400
MEAN	13950	3907	2945	2800	2700	2600	3703	46900	63910	40130	17270	15310
MAX	25000	5600	3000	2800	2700	2600	7300	80000	90000	64000	22000	23800
MIN	5800	3100	2900	2800	2700	2600	2600	8000	41000	23000	13200	9000
CFSM	1.47	.41	.31	.29	.28	.27	.39	4.93	6.71	4.22	1.81	1.61
IN.	1.69	.46	.36	.34	.31	.31	.43	5.68	7.49	4.86	2.09	1.80
AC-FT	857700	232500	181100	172200	155300	159900	220400	2884000	3803000	2467000	1062000	911200

CAL YR 1979 TOTAL 7416600 MEAN 20320 MAX 92700 MIN 1900 CFSM 2.13 IN 28.98 AC-FT 14710000
WTR YR 1980 TOTAL 6608000 MEAN 18050 MAX 90000 MIN 2600 CFSM 1.90 IN 25.82 AC-FT 13110000

NOTE.--No gage-height record Oct. 16 to June 9 and June 29 to Aug. 20.

15744500 KOBUK RIVER NEAR KIANA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June to September 1978, May to September 1979, and June, August, and September 1980.

INSTRUMENTATION.--Water-temperature recorder since June 10, 1978.

REMARKS.--No temperature record prior to June 9 and June 21 to Aug. 21.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum recorded, 19.0°C July 14, 15, 1978; minimum, 0.0°C during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 12.0°C June 17, 18; minimum, 0.0°C during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
FEB 08...	1200	2700	195	6.4	.0	.90	--	K2	K1	100	22
JUN 10...	1430	70000	98	7.2	8.0	13	11.0	20	K8	47	13
AUG 22...	1430	13900	162	6.7	10.0	16	10.7	K1	<1	79	6

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
FEB 08...	32	5.9	2.2	.8	100	23	.7	.0	6.1	110	122
JUN 10...	15	2.2	.8	.5	55	8.3	.3	.1	2.5	53	51
AUG 22...	25	3.9	1.1	.4	78	15	.7	.1	3.3	81	99

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)
FEB 08...	.34	.34	.080	.060	.22	.16	.30	.08	.22	.64	.56
JUN 10...	.17	.19	.040	.000	2.0	.37	2.0	1.6	.37	2.2	.56
AUG 22...	1.6	1.2	.000	.000	.92	.36	.92	.56	.36	2.5	1.6

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)
FEB 08...	.000	.010	--	--	--	--	2.1	--	--	--	--
JUN 10...	.050	.010	--	--	--	--	--	5.6	--	1	0
AUG 22...	.050	.000	10.9	13.7	7.39	.240	--	7.6	.0	1	0

K NON-IDEAL COLONY COUNT

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
FEB 08...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	1	0	0	20	3	0	7	0	0	0	2
AUG 22...	1	100	80	20	1	--	<1	10	0	10	0

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
FEB 08...	--	--	--	--	--	--	--	--	--	--	--
JUN 10...	<3	10	7	3	3300	3200	150	18	14	4	110
AUG 22...	<3	18	11	7	480	350	130	9	9	0	20

DATE	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)
FEB 08...	--	--	--	--	--	--	--	--	--	--
JUN 10...	100	9	.4	.3	.1	7	5	2	0	0
AUG 22...	10	10	.1	.1	.0	6	6	0	0	0

DATE	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB 08...	--	0	--	--	--	--	--	11	80	3
JUN 10...	0	0	0	0	30	0	30	90	17000	52
AUG 22...	0	0	0	0	30	--	<3	11	413	72

15744500 KOBUK RIVER NEAR KIANA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	FEB 8,80		JUN 10,80		AUG 22,80	
TIME	1200		1430		1430	
TOTAL CELLS/ML	200		170		940	
DIVERSITY: DIVISION	0.3		0.6		0.5	
.CLASS	0.3		0.6		0.5	
..ORDER	0.3		0.6		0.5	
...FAMILY	0.3		0.6		0.6	
....GENUS	0.6		1.3		0.6	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...OOCYSTACEAE						
....ANKISTRODESMUS	10	5	--	-	13	1
....CHLORELLA	180#	90	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	52	5
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	100#	62	--	-
....SCENEDESMUS	--	-	39#	23	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	10	5	--	-	--	-
..PENNALES						
...FRAGILARIACEAE						
....FRAGILARIA	--	-	26#	15	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	13	1
...NITZSCHIACEAE						
....NITZSCHIA	--	-	--	-	13	1
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	--	-	850#	90

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15744500 KOBUK RIVER NEAR KIANA--Continued

TEMPERATURE, WATER (DEG. C), JUNE TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---				---	---	---	5.5	4.5	5.0
2	---	---	---				---	---	---	5.0	4.0	4.5
3	---	---	---				---	---	---	4.0	3.5	4.0
4	---	---	---				---	---	---	4.5	3.5	4.0
5	---	---	---				---	---	---	4.5	3.0	3.5
6	---	---	---				---	---	---	4.5	3.5	4.0
7	---	---	---				---	---	---	5.5	4.0	4.5
8	---	---	---				---	---	---	5.5	4.0	5.0
9	---	---	---				---	---	---	6.0	4.5	5.5
10	8.5	8.0	8.0				---	---	---	6.5	5.0	5.5
11	8.5	---	8.0				---	---	---	6.5	5.5	6.0
12	8.5	---	7.5				---	---	---	6.5	5.5	6.0
13	9.0	7.5	8.0				---	---	---	7.0	6.5	6.5
14	10.5	8.0	9.0				---	---	---	7.5	7.0	7.0
15	11.0	9.0	10.0				---	---	---	7.5	7.0	7.0
16	11.0	9.5	10.5				---	---	---	7.0	6.0	6.5
17	12.0	10.0	11.0				---	---	---	6.5	6.0	6.0
18	12.0	10.5	11.0				---	---	---	6.5	6.0	6.0
19	11.5	10.5	11.0				---	---	---	6.5	5.0	6.0
20	10.5	10.0	10.0				---	---	---	5.0	3.5	4.0
21	---	---	---				---	---	---	3.5	2.5	3.0
22	---	---	---				10.5	9.5	10.0	2.0	1.0	1.5
23	---	---	---				10.5	9.5	10.0	2.0	.5	1.0
24	---	---	---				10.0	9.5	10.0	2.0	.5	1.0
25	---	---	---				10.0	9.0	9.5	1.0	---	---
26	---	---	---				9.5	9.0	9.5	1.0	.0	.5
27	---	---	---				9.5	8.5	9.0	.0	---	---
28	---	---	---				9.0	8.5	8.5	.0	.0	.0
29	---	---	---				8.5	7.0	8.0	.5	.0	.5
30	---	---	---				7.5	6.5	7.0	1.0	.0	.5
31	---	---	---				7.0	5.5	6.5	---	---	---
MONTH										7.5	.0	4.0

15798700 NUNAVAK CREEK NEAR BARROW

LOCATION.--Lat 71°15'35", long 156°46'57", in SE¼ sec.18, T.22 N., R.18 W., North Slope Borough, Hydrologic Unit 19010003, 0.7 mi (1.1 km) downstream from Emaiksoun Lake, 1.2 mi (1.9 km) upstream from Nunavak Bay, and 2.3 mi (3.7 km) south of Barrow Post Office.

DRAINAGE AREA.--2.79 mi^2 (7.23 km^2), approximately.

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--WDR AK-76-1:1972

GAGE.--Water-stage recorder. Altitude of gage is 19 ft (5.8 m), from topographic map.

REMARKS.--Records poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--9 years, 0.80 ft^3/s (0.023 m^3/s), 3.89 in/yr (99 mm/yr), 580 acre-ft/yr (715,000 m^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131 cfs (3.71 m^3/s) June 10, 1980, gage height, 4.86 ft (1.481 m), flow over snow; no flow during all winter months and at times during summer months.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 131 ft^3/s (3.71 m^3/s) June 10, flow over snow; no flow Oct. 11 to June 8, Aug. 12-20, and Sept. 21-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.00	.00	.00	.00	.00	.00	.00	.00	1.2	.01	.05
2	2.0	.00	.00	.00	.00	.00	.00	.00	.00	1.0	.01	.06
3	1.3	.00	.00	.00	.00	.00	.00	.00	.00	.85	.01	.07
4	.40	.00	.00	.00	.00	.00	.00	.00	.00	.79	.01	.08
5	.40	.00	.00	.00	.00	.00	.00	.00	.00	.85	.05	.10
6	.20	.00	.00	.00	.00	.00	.00	.00	.00	.74	.10	.08
7	.10	.00	.00	.00	.00	.00	.00	.00	.00	.50	.08	.06
8	.06	.00	.00	.00	.00	.00	.00	.00	.00	.36	.06	.04
9	.04	.00	.00	.00	.00	.00	.00	.00	2.5	.30	.04	.02
10	.02	.00	.00	.00	.00	.00	.00	.00	54	.24	.02	.01
11	.00	.00	.00	.00	.00	.00	.00	.00	80	.20	.01	.01
12	.00	.00	.00	.00	.00	.00	.00	.00	56	.46	.00	.01
13	.00	.00	.00	.00	.00	.00	.00	.00	64	.23	.00	.03
14	.00	.00	.00	.00	.00	.00	.00	.00	53	.14	.00	.05
15	.00	.00	.00	.00	.00	.00	.00	.00	33	.10	.00	.03
16	.00	.00	.00	.00	.00	.00	.00	.00	21	.07	.00	.02
17	.00	.00	.00	.00	.00	.00	.00	.00	17	.05	.00	.01
18	.00	.00	.00	.00	.00	.00	.00	.00	13	.04	.00	.01
19	.00	.00	.00	.00	.00	.00	.00	.00	10	.03	.00	.01
20	.00	.00	.00	.00	.00	.00	.00	.00	7.7	.03	.00	.01
21	.00	.00	.00	.00	.00	.00	.00	.00	5.7	.03	.02	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	4.5	.02	.04	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	4.2	.02	.03	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	4.2	.02	.02	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	3.6	.02	.02	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	2.7	.02	.02	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	3.6	.02	.01	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	3.6	.01	.01	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	3.0	.01	.02	.00
30	.00	.00	.00	.00	---	.00	.00	.00	2.2	.01	.03	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.01	.04	---
TOTAL	6.72	.00	.00	.00	.00	.00	.00	.00	448.50	8.37	.66	.76
MEAN	.22	.000	.000	.000	.000	.000	.000	.000	15.0	.27	.021	.025
MAX	2.2	.00	.00	.00	.00	.00	.00	.00	80	1.2	.10	.10
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
CFSM	.08	.000	.000	.000	.000	.000	.000	.000	5.38	.10	.008	.009
IN.	.09	.00	.00	.00	.00	.00	.00	.00	5.98	.11	.01	.01
AC-FT	13	.00	.00	.00	.00	.00	.00	.00	890	17	1.3	1.5

CAL YR 1979 TOTAL 297.64 MEAN .82 MAX 16 MIN .00 CFSM .29 IN 3.97 AC-FT 590
WTR YR 1980 TOTAL 465.01 MEAN 1.27 MAX 80 MIN .00 CFSM .46 IN 6.20 AC-FT 922

NOTE.--No gage-height record Oct. 7 to June 9 and July 9 to Sept. 4.

15896000 KUPARUK RIVER NEAR DEADHORSE
(National stream-quality accounting network station)

LOCATION.--Lat 70°16'54", long 148°57'35", in NE¼ sec.25, T.11 N., R.12 E., North Slope Borough, Hydrologic Unit 19010001, near right bank, 1.8 mi (2.9 km) northeast of SE Eileen State No. 1, 2.1 mi (3.4 km) south of Arctic Slope/Alaska General Camp, 10 mi (16 km) upstream from mouth on Gwyder Bay, and 13 mi (21 km) northwest of Deadhorse.

DRAINAGE AREA.--3,130 mi² (8,107 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by private engineering firm).

REMARKS.--Water-discharge records estimated and poor for period of no gage-height record, Oct. 4 to June 7, fair thereafter. Winter low flow may be discontinuous as the flow probably varies significantly along the main stem of the river due to the formation of aufeis in the vicinity of springs. Flow may cease at other points.

AVERAGE DISCHARGE.--9 years, 1,293 ft³/s (33.62 m³/s), 5.61 in/yr (142 mm/yr), 936,800 acre-ft/yr (1.16 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 118,000 ft³/s (3,340 m³/s) June 7, 1978, gage height, 37.6 ft (11.46 m), from rangeline on recorder chart; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40,500 ft³/s (1,150 m³/s) June 12, gage height, 33.76 ft (10.290 m); maximum gage height, 34.50 ft (10.516 m) June 7, backwater from ice; no flow Oct. 29 to May 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	560	.00	.00	.00	.00	.00	.00	.00	2000	1170	1150	4400
2	520	.00	.00	.00	.00	.00	.00	.00	3000	990	1250	4400
3	480	.00	.00	.00	.00	.00	.00	.00	5000	860	1350	4070
4	440	.00	.00	.00	.00	.00	.00	.00	10000	957	1310	3350
5	410	.00	.00	.00	.00	.00	.00	.00	20000	924	1210	2960
6	380	.00	.00	.00	.00	.00	.00	.00	30000	850	1640	2750
7	350	.00	.00	.00	.00	.00	.00	.00	35000	1190	2140	2520
8	330	.00	.00	.00	.00	.00	.00	.00	35100	1780	2000	2280
9	310	.00	.00	.00	.00	.00	.00	.00	26700	1500	1900	2100
10	290	.00	.00	.00	.00	.00	.00	.00	30200	1170	2580	2160
11	270	.00	.00	.00	.00	.00	.00	.00	36900	913	6150	2440
12	250	.00	.00	.00	.00	.00	.00	.00	33100	735	5560	2220
13	230	.00	.00	.00	.00	.00	.00	.00	23600	663	3920	2100
14	220	.00	.00	.00	.00	.00	.00	.00	28600	592	3050	2160
15	200	.00	.00	.00	.00	.00	.00	.00	28600	645	2560	2180
16	190	.00	.00	.00	.00	.00	.00	.00	13300	735	2480	2180
17	180	.00	.00	.00	.00	.00	.00	.00	7650	1070	2990	2100
18	160	.00	.00	.00	.00	.00	.00	.00	4760	1410	3410	2160
19	150	.00	.00	.00	.00	.00	.00	.00	3680	1220	3860	1740
20	140	.00	.00	.00	.00	.00	.00	.00	2990	1100	3650	1110
21	130	.00	.00	.00	.00	.00	.00	.00	2630	1000	3050	1050
22	110	.00	.00	.00	.00	.00	.00	.00	2320	900	2560	960
23	90	.00	.00	.00	.00	.00	.00	20	2280	800	2200	900
24	70	.00	.00	.00	.00	.00	.00	50	2380	730	1840	850
25	50	.00	.00	.00	.00	.00	.00	100	2260	700	1640	800
26	40	.00	.00	.00	.00	.00	.00	150	2060	730	1420	760
27	30	.00	.00	.00	.00	.00	.00	200	1840	750	1330	720
28	20	.00	.00	.00	.00	.00	.00	300	1640	800	1620	680
29	.00	.00	.00	.00	.00	.00	.00	500	1440	850	3560	600
30	.00	.00	.00	.00	---	.00	.00	800	1230	900	4880	520
31	.00	---	.00	.00	---	.00	---	1200	---	1000	4760	---
TOTAL	6600.00	.00	.00	.00	.00	.00	.00	3320.00	400260	29634	83020	59220
MEAN	213	.000	.000	.000	.000	.000	.000	107	13340	956	2678	1974
MAX	560	.00	.00	.00	.00	.00	.00	1200	36900	1780	6150	4400
MIN	.00	.00	.00	.00	.00	.00	.00	.00	1230	592	1150	520
CFSM	.07	.000	.000	.000	.000	.000	.000	.03	4.26	.31	.86	.63
IN.	.08	.00	.00	.00	.00	.00	.00	.04	4.76	.35	.99	.70
AC-FT	13090	.00	.00	.00	.00	.00	.00	6590	793900	58780	164700	117500

CAL YR 1979 TOTAL 372608.00 MEAN 1021 MAX 22600 MIN .00 CFSM .33 IN 4.43 AC-FT 739100
WTR YR 1980 TOTAL 582054.00 MEAN 1590 MAX 36900 MIN .00 CFSM .51 IN 6.92 AC-FT 1155000

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 18...	1300	162	160	7.0	.0	.20	--	2	0	82	4	28
NOV 21...	1300	.00	206	6.6	.0	.30	--	0	0	110	4	38
JUN 07...	1600	35700	42	5.9	1.0	6.3	13.0	K14	K1	21	5	6.8
JUL 17...	1800	1250	140	7.0	11.0	11	11.2	0	--	56	0	19
SEP 09...	1700	2070	113	7.4	4.5	1.2	12.4	K2	K1	62	13	21

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 18...	2.8	2.3	.3	94	6.5	1.8	.1	2.2	96	91	.14	.06
NOV 21...	3.9	2.9	.4	128	8.0	2.3	.1	2.7	144	122	.20	.18
JUN 07...	1.0	.6	1.0	19	3.3	2.1	.0	1.0	43	26	.04	.05
JUL 17...	2.0	2.1	.4	70	1.1	1.3	1.9	1.6	76	64	.00	.00
SEP 09...	2.2	1.4	.5	72	.1	1.9	.1	2.3	76	68	.09	.08

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 18...	.000	.030	.69	.59	.69	.07	.62	.83	.68	.010	.020	--
NOV 21...	.020	.030	.50	.62	.52	.00	.65	.72	.83	.000	.060	19
JUN 07...	.060	.070	.93	.92	.99	.00	.99	1.0	1.0	.140	.020	--
JUL 17...	.080	.010	.50	.49	.58	.08	.50	.58	.50	.010	.010	--
SEP 09...	.000	.010	.64	.59	.64	.04	.60	.73	.68	.020	.020	9.4

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT 18...	11	.2	0	0	0	200	100	60	1	0	2	10
NOV 21...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 07...	16	1.9	1	0	1	0	0	20	2	0	3	0
JUL 17...	6.2	.2	0	0	0	0	0	50	0	--	<1	0
SEP 09...	--	--	1	1	0	100	70	30	1	--	<1	0

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT 18...	10	0	4	1	<3	2	2	0	40	30	10	10
NOV 21...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 07...	0	0	3	--	<3	23	15	8	4700	4400	280	69
JUL 17...	0	0	0	--	<3	9	4	5	90	60	30	5
SEP 09...	0	0	0	--	<3	6	0	7	230	180	50	4

DATE	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)
OCT 18...	1	9	4	2	2	.0	.0	.0	0	0	0	0
NOV 21...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 07...	56	13	170	140	30	.2	.2	.0	17	14	3	0
JUL 17...	2	3	10	7	3	.0	.0	.0	2	0	4	0
SEP 09...	2	2	10	7	3	.0	.0	.0	5	3	2	0

DATE	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 18...	0	0	0	0	0	0	0	<3	3	1.3	--
NOV 21...	--	--	1	--	--	--	--	--	1	.00	--
JUN 07...	0	0	0	0	0	70	60	10	207	20000	54
JUL 17...	0	0	4	4	0	10	2	8	9	30	65
SEP 09...	0	0	0	0	0	40	30	9	3	17	--

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	OCT 18,79	NOV 21,79	JUN 7,80	JUL 17,80	SEP 9,80
TIME	1300	1300	1600	1800	1700
TOTAL CELLS/ML	9	2	440	77	26
DIVERSITY: DIVISION	0.0	0.0	0.9	0.9	0.0
.CLASS	0.0	0.0	0.9	0.9	0.0
..ORDER	0.0	0.0	1.1	0.9	0.0
...FAMILY	1.6	0.0	2.3	1.3	1.0
....GENUS	1.6	0.0	2.4	1.3	1.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	2#	100	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	13	3	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	13	3	--	-	13#	50
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	13	3	13#	17	--	-
...DIATOMACEAE										
....DIATOMA	3#	38	--	-	--	-	13#	17	13#	50
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	13	3	--	-	--	-
....SYNEDRA	--	-	--	-	26	6	--	-	--	-
...NAVICULACEAE										
....NAVICULA	3#	38	--	-	26	6	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	39	9	--	-	--	-
...TABELLARIACEAE										
....TABELLARIA	2#	25	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	51#	67	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	120#	26	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	180#	41	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

15904900 ATIGUN RIVER TRIBUTARY NEAR PUMP STATION 4

LOCATION.--Lat 68°22'25", long 149°18'48", in NE¼SE¼ sec.28, T.12 S., R.12 E., North Slope Borough, Hydrologic Unit 19010001, on right bank 0.2 mi (0.3 km) upstream from culvert at mile 191 on TAPS haul road, 0.9 mi (1.4 km) above mouth and 4 mi (6 km) south of Pump Station 4.

DRAINAGE AREA.--32.6 mi^2 (84.4 km^2).

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,790 ft (850 m), from topographic map.

REMARKS.--Records fair except those for periods of no gage-height record, Oct. 1 to June 3 and Aug. 23 to Sept. 30, which are estimated and poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 656 ft^3/s (18.6 m^3/s) June 27, 1980, gage height, 13.74 ft (4.188 m), from floodmarks, from rating curve extended above 260 ft^3/s (7.4 m^3/s) on basis of slope-area measurement at a gage height of 14.5 ft (4.42 m); no flow during winter periods.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of July 29-30, 1976 reached a stage of 14.5 ft (4.42 m), from floodmarks, discharge, 1,000 ft^3/s (28.3 m^3/s), from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 656 ft^3/s (18.6 m^3/s) June 27, gage height, 13.74 ft (4.188 m) from floodmarks, from rating curve extended as explained above; no flow Oct. 23 to May 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	.00	.00	.00	.00	.00	.00	.00	20	219	112	16
2	6.0	.00	.00	.00	.00	.00	.00	.00	25	192	106	14
3	5.0	.00	.00	.00	.00	.00	.00	.00	30	165	105	12
4	5.0	.00	.00	.00	.00	.00	.00	.00	74	267	95	11
5	4.0	.00	.00	.00	.00	.00	.00	.00	226	179	91	10
6	4.0	.00	.00	.00	.00	.00	.00	.00	100	151	160	9.0
7	3.0	.00	.00	.00	.00	.00	.00	.00	137	158	179	8.0
8	3.0	.00	.00	.00	.00	.00	.00	.00	73	152	263	7.0
9	3.0	.00	.00	.00	.00	.00	.00	.00	42	148	275	6.0
10	2.0	.00	.00	.00	.00	.00	.00	.00	61	158	190	6.0
11	2.0	.00	.00	.00	.00	.00	.00	.00	98	127	136	5.0
12	2.0	.00	.00	.00	.00	.00	.00	.00	129	163	116	5.0
13	2.0	.00	.00	.00	.00	.00	.00	.00	174	148	100	4.0
14	2.0	.00	.00	.00	.00	.00	.00	.00	136	305	122	4.0
15	2.0	.00	.00	.00	.00	.00	.00	.00	221	221	112	4.0
16	1.0	.00	.00	.00	.00	.00	.00	.00	186	190	88	4.0
17	1.0	.00	.00	.00	.00	.00	.00	.00	202	132	80	3.0
18	1.0	.00	.00	.00	.00	.00	.00	.00	230	110	70	3.0
19	1.0	.00	.00	.00	.00	.00	.00	.00	320	99	60	3.0
20	1.0	.00	.00	.00	.00	.00	.00	.00	184	78	52	3.0
21	1.0	.00	.00	.00	.00	.00	.00	.00	102	77	45	3.0
22	1.0	.00	.00	.00	.00	.00	.00	.00	78	73	40	3.0
23	.00	.00	.00	.00	.00	.00	.00	.00	85	77	35	2.0
24	.00	.00	.00	.00	.00	.00	.00	2.0	103	72	30	2.0
25	.00	.00	.00	.00	.00	.00	.00	10	143	89	35	2.0
26	.00	.00	.00	.00	.00	.00	.00	50	192	82	40	2.0
27	.00	.00	.00	.00	.00	.00	.00	40	289	126	35	2.0
28	.00	.00	.00	.00	.00	.00	.00	35	285	217	30	2.0
29	.00	.00	.00	.00	.00	.00	.00	30	241	145	25	2.0
30	.00	.00	.00	.00	---	.00	.00	25	303	115	20	2.0
31	.00	---	.00	.00	---	.00	---	20	---	126	18	---
TOTAL	59.00	.00	.00	.00	.00	.00	.00	212.00	4489	4561	2865	159.0
MEAN	1.90	.000	.000	.000	.000	.000	.000	6.84	150	147	92.4	5.30
MAX	7.0	.00	.00	.00	.00	.00	.00	50	320	305	275	16
MIN	.00	.00	.00	.00	.00	.00	.00	.00	20	72	18	2.0
CFSM	.06	.000	.000	.000	.000	.000	.000	.21	4.60	4.51	2.83	.16
IN.	.07	.00	.00	.00	.00	.00	.00	.24	5.12	5.20	3.27	.18
AC-FT	117	.00	.00	.00	.00	.00	.00	421	8900	9050	5680	315

CAL YR 1979 TOTAL 11329.50 MEAN 31.0 MAX 440 MIN .00 CFSM .95 IN 12.93 AC-FT 22470
WTR YR 1980 TOTAL 12345.00 MEAN 33.7 MAX 320 MIN .00 CFSM 1.03 IN 14.09 AC-FT 24490

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited stream-flow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are useable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in Alaska made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. For some stations, measurements made periodically through the year are also included. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1980

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Southeast Alaska				
+15011858	Keta River below Red Creek near Ketchikan	Lat 55°23'18", long 130°22'30", in NW¼ NE¼ sec.9, T.75 S., R.99 E., about 300 ft downstream from Red Creek, 5.7 mi upstream from mouth, and 51 mi east of Ketchikan.	50.6	1980	5- 3-80 8- 7-80	501 270
+15011860	Keta River above Hill Creek near Ketchikan	Lat 55°22'34", long 130°23'58", in SW¼ SE¼ sec.8, T.75 S., R.99 E., about 300 ft upstream from Hill Creek, 4.2 mi upstream from mouth, and 49 mi east of Ketchikan.	52.6	a1978, 1980	11-27-79 2-14-80	145 206
+15011865	Hill Creek above White Creek near Ketchikan	Lat 55°25'16", long 130°27'00", in SW¼ SE¼ sec.25, T.74 S., R.98 E., about 500 ft upstream from White Creek and 47 mi east of Ketchikan.	5.53	a1978, 1980	2-14-80 5- 3-80	18 63
+15011875	Hill Creek near mouth near Ketchikan	Lat 55°22'56", long 130°24'23", in SE¼ NW¼ sec.8, T.75 S., R.99 E., about 0.5 mi upstream from mouth and 49 mi east of Ketchikan.	14.0	a1978, 1980	11-28-79 2-14-80 5- 3-80 8- 7-80	34 41 148 71
+15011890	Beaver Creek near Ketchikan	Lat 55°25'42", long 130°30'58", in SE¼ NE¼ sec.28, T.74 S., R.98 E., 0.8 mi upstream from mouth and 45 mi east of Ketchikan.	1.98	a1978, 1980	2-14-80 5- 3-80 8- 7-80	8.3 26 11
		South-central Alaska				
15238800	Fish Creek at Seldovia	Lat 59°26'10", long 151°42'05", in S½ sec.32, T.8 S., R.14 W., Kenai Peninsula Borough, upstream from dam, 0.1 mi upstream from mouth, and 0.5 mi southeast of Seldovia.	3.83	a1967-68, a1970, a1972-73, 1978-80	3- 7-80 7-25-80 9- 4-80	7.8 b4.6 b3.4
15238810	Seldovia Lagoon tributary near Seldovia	Lat 59°26'30", long 151°41'05", in SW¼ sec.33, T.8 S., R.14 W., Kenai Peninsula Borough, upstream from reservoir, 0.9 mi upstream from mouth and 1.2 mi east of Seldovia.	0.93	a1967-68, a1970, a1972-73, 1978-80	3- 6-80 7-25-80 9- 4-80	1.9 b0.76 b0.71
15239300	Falls Creek near Homer	Lat 59°47'23", long 151°07'14", in SE¼ NW¼ sec.35, T.4 S., R.11 W., Kenai Peninsula Borough, 500 ft downstream from unnamed left bank tributary, and 17 mi northeast of Homer.	2.84	1978-80	3- 5-80 7-23-80 9- 4-80	1.8 b2.6 b1.6
*15239500	Fritz Creek near Homer	Lat 59°42'30", long 151°20'35", in SW¼ sec.28, T.5 S., R.12 W., Kenai Peninsula Borough, at culvert on East Road and 9 mi northeast of Homer.	10.4	a1962-77, 1978-80	11-29-79 3- 5-80 5- 1-80 7-23-80 9- 5-80	91 7.7 68 b8.9 b5.5

+ See analyses of samples collected at water-quality partial-record stations.
* Also crest-stage partial-record station.
a Published in miscellaneous measurements table.
b Base flow.

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Measurements	
					Date	Discharge (ft³/s)
		South-central Alaska--Continued				
*15239800	Diamond Creek near Homer	Lat 59°40'10", long 151°40'00", in SE¼ sec.9, T.6 S., R.14 W., Kenai Peninsula Borough, at culvert on Sterling Highway, 1.3 mi upstream from mouth at Cook Inlet and 4.6 mi northwest of Homer.	5.35	a1962-77, 1978-80	11-29-79 3- 6-80 5- 1-80 7-23-80 9- 2-80	62 5.3 60 b4.0 b3.2
15239805	Anchor River near Homer	Lat 59°48'32", long 151°23'51", in NE¼ NE¼ sec.30, T.4 S., R.12 W., Kenai Peninsula Borough, 200 ft upstream from unnamed right bank tributary, and 12 mi north of Homer.	28.8	1978-80	3- 5-80 7-24-80 9- 3-80	19 b31 b24
15239807	Anchor River tributary at mouth near Homer	Lat 59°48'35", long 151°23'56", in SE¼ SE¼ sec.19, T.4 S., R.12 W., Kenai Peninsula Borough, 500 ft upstream from mouth, and 12 mi north of Homer.	20.1	1978-80	3- 5-80 7-24-80 9- 3-80	22 b28 b24
15239810	Anchor River above Beaver Creek near near Homer	Lat 59°45'10", long 151°30'31", in SW¼ SW¼ sec.9, T.5 S., R.13 W., Kenai Peninsula Borough, 50 ft upstream from Beaver Creek, and 7.2 mi north of Homer.	63.2	1978-80	3- 5-80 7-24-80 9- 3-80	66 b77 b68
15239818	Beaver Creek near Bald Mountain near Homer	Lat 59°44'59", long 151°19'44", in NE¼ NW¼ sec.16, T.5 S., R.12 W., Kenai Peninsula Borough, at bridge and 10 mi northeast of Homer.	5.41	1978-80	3- 5-80 7-23-80 9- 4-80	2.6 b3.5 b2.4
15239822	Beaver Creek at mouth near Homer	Lat 59°45'09", long 151°30'29", in SW¼ SW¼ sec.9, T.5 S., R.13 W., Kenai Peninsula Borough, 200 ft upstream from mouth, and 7.2 mi north of Homer.	19.8	1978-80	3- 5-80 7-24-80 9- 3-80	14 b20 b14
15239840	Anchor River above Twitter Creek near Homer	Lat 59°43'08", long 151°38'31", in NE¼ NW¼ sec.27, T.5 S., R.14 W., Kenai Peninsula Borough, 30 ft upstream from Twitter Creek, and 6.3 mi northwest of Homer.	105	1978-80	3- 6-80 7-22-80 9- 2-80	103 b140 b103
15239845	Twitter Creek near Lookout Mountain near Homer	Lat 59°42'00", long 151°28'38", in NE¼ SW¼ sec.34, T.5 S., R.13 W., Kenai Peninsula Borough, 200 ft upstream from old road crossing, and 3.9 mi northeast of Homer.	1.63	1978-80	3- 5-80 7-23-80 9- 4-80	1.1 b2.4 b1.4
15239880	Twitter Creek near Homer	Lat 59°42'54", long 151°37'46", in SE¼ sec.27, T.5 S., R.14 W., Kenai Peninsula Borough, 0.6 mi upstream from mouth, and 5.7 mi northwest of Homer.	16.1	1971-73‡, 1978-80	3- 6-80 7-22-80 9- 2-80	15 b22 b14
15239970	North Fork Anchor River above Chakok River near Anchor Point	Lat 59°47'41", long 151°43'46", in SE¼ SW¼ sec.29, T.4 S., R.14 W., Kenai Peninsula Borough, 20 ft downstream from bridge, 0.4 mi upstream from Chakok River, and 3.8 mi east of Anchor Point.	18.4	1978-80	3- 6-80 7-22-80 9- 2-80	18 b20 b18
15239980	Chakok River near Anchor Point	Lat 59°48'03", long 151°43'51", in NW¼ SW¼ sec.29, T.4 S., R.14 W., Kenai Peninsula Borough, 0.5 mi upstream from mouth, and 3.9 mi northeast of Anchor Point.	38.7	1978-80	3- 6-80 7-22-80 9- 2-80	28 b27 b25
15239990	North Fork Anchor River at mouth at Anchor Point	Lat 59°46'24", long 151°49'52", in SE¼ NE¼ sec.4, T.5 S., R.15 W., Kenai Peninsula Borough, 50 ft upstream from mouth at Anchor Point.	65.7	a1951-52, 1978-80	3- 3-80 7-22-80 9- 2-80	81 b60 b51
15240000	Anchor River at Anchor Point	Lat 59°46'21", long 151°50'05", in SE¼ sec.4, T.5 S., R.15 W., Kenai Peninsula Borough, at Old Sterling Highway bridge at Anchor Point, 0.1 mi downstream from North Fork, and 1 mi upstream from mouth.	224	1953-66‡, 1978-80	3- 3-80 7-22-80 9- 2-80	247 b251 b195

* Also crest-stage partial-record station.
‡ Operated as a continuous-record station.
a Published in miscellaneous measurements table.
b Base flow.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		South-central Alaska--Continued				
15240200	Stariski Creek near Ninilchik	Lat 59°55'07", long 151°38'59", in SW¼ NW¼ sec.14, T.13 S., R.14 W., Kenai Peninsula Borough, 50 ft downstream from unnamed right bank tributary and 8.8 mi south of Ninilchik.	27.8	1978-80	3- 4-80 7-24-80 9- 3-80	19 b29 b21
15240300	Stariski Creek near Anchor Point	Lat 59°51'09", long 151°47'17", in NW¼ NW¼ sec.12, T.4 S., R.15 W., Kenai Peninsula Borough, 100 ft downstream from culvert at Sterling Highway, and 5.5 mi north of Anchor Point.	49.4	a1951-52, 1978-80	3- 3-80 7-22-80 9- 2-80	43 b46 b34
15240400	Happy Creek at Happy Valley	Lat 59°56'16", long 151°44'06", in NW¼ NW¼ sec.8, T.3 S., R.14 W., Kenai Peninsula Borough, 20 ft upstream from culvert at Sterling Highway at Happy Valley and 0.4 mi upstream from mouth.	7.74	1978-80	3- 3-80 7-22-80 9- 2-80	6.4 b6.8 b7.8
15240600	Deep Creek above tributary 1 near Ninilchik	Lat 59°56'31", long 151°12'59", in SW¼ SW¼ sec.5, T.3 S., R.11 W., Kenai Peninsula Borough, 300 ft upstream from unnamed left bank tributary, 0.7 mi upstream from Cytex Creek, and 17 mi southeast of Ninilchik.	18.9	1978-80	3- 5-80 7-24-80 9- 3-80	17 b22 b16
15240700	Deep Creek tributary 1 at mouth near Ninilchik	Lat 59°56'30", long 151°13'03", in SW¼ SW¼ sec.5, T.3 S., R.11 W., Kenai Peninsula Borough, 200 ft upstream from mouth, and 17 mi southeast of Ninilchik.	16.0	1978-80	3- 4-80 7-24-80 9- 3-80	9.1 b14 b12
15240800	Deep Creek above North Fork near Ninilchik	Lat 59°58'56", long 151°14'48", in SW¼ SW¼ sec.19, T.2 S., R.11 W., Kenai Peninsula Borough, 200 ft upstream from North Fork, and 15 mi east of Ninilchik.	58.5	1978-80	3- 4-80 7-24-80 9- 3-80	51 b62 b49
15240900	North Fork Deep Creek at mouth near Ninilchik	Lat 59°58'59", long 151°14'52", in SW¼ SW¼ sec.19, T.2 S., R.11 W., Kenai Peninsula Borough, 500 ft upstream from mouth, and 15 mi east of Ninilchik.	38.9	1978-80	3- 4-80 7-24-80 9- 3-80	38 b53 b44
15241000	Deep Creek above South Fork near Ninilchik	Lat 59°57'52", long 151°29'22", in SW¼ NE¼ sec.34, T.2 S., R.13 W., Kenai Peninsula Borough, 50 ft upstream from South Fork, and 8.5 mi southeast of Ninilchik.	119	1978-80	3- 5-80 7-24-80 9- 3-80	125 b146 b124
15241100	South Fork Deep Creek at mouth near Ninilchik	Lat 59°57'47", long 151°29'20", in SW¼ NE¼ sec.34, T.2 S., R.13 W., Kenai Peninsula Borough, 0.2 mi upstream from mouth, and 8.5 mi southeast of Ninilchik.	29.4	1978-80	3- 5-80 7-24-80 9- 3-80	18 b25 b23
15241200	Deep Creek above tributary 2 near Ninilchik	Lat 60°00'22", long 151°37'26", in SE¼ NE¼ sec.14, T.2 S., R.14 W., Kenai Peninsula Borough, 400 ft upstream from unnamed right bank tributary, and 3.2 mi southeast of Ninilchik.	161	1978-80	3- 4-80 7-24-80 9- 3-80	173 b196 b157
15241300	Deep Creek tributary 2 at mouth near Ninilchik	Lat 60°00'26", long 151°37'23", in SE¼ NE¼ sec.14, T.2 S., R.14 W., Kenai Peninsula Borough, 100 ft upstream from mouth, and 3.2 mi southeast of Ninilchik.	35.6	1978-80	3- 4-80 7-24-80 9- 3-80	14 b19 b16
15241400	Clam Creek near Ninilchik	Lat 60°00'39", long 151°39'22", in NE¼ NE¼ sec.15, T.2 S., R.14 W., Kenai Peninsula Borough, 0.6 mi upstream from mouth, and 2.6 mi south of Ninilchik.	20.0	1978-80	3- 3-80 7-22-80 9- 2-80	15 b16 b15
15241500	Deep Creek near Ninilchik	Lat 60°01'50", long 151°40'50", on line between sec.3 and 4, T.2 S., R.14 W., Kenai Peninsula Borough, at bridge on Sterling Highway, 1 mi upstream from mouth, and 1.5 mi southwest of Ninilchik.	220	a1951-52, a1954, a1959-61, a1965-68, 1978-80	3- 3-80 7-22-80 9- 2-80	203 b247 b211

a Published in miscellaneous measurements table.
b Base flow.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	 Discharge (ft^3/s)
		South-central Alaska--Continued				
15241510	Ninilchik River above tributary 1 near Clam Gulch	Lat 60°09'55", long 151°19'09", in SE¼ NW¼ sec.23, T.1 N., R.12 W., Kenai Peninsula Borough, 30 ft upstream from unnamed right bank tributary, and 5.2 mi southeast of Clam Gulch.	19.5	1978-80	3- 4-80 7- 24-80 9- 3-80	12 b11 b11
15241520	Ninilchik River tributary 1 at mouth near Clam Gulch	Lat 60°09'56", long 151°19'09", in SE¼ NW¼ sec.23, T.1 N., R.12 W., Kenai Peninsula Borough, 40 ft upstream from mouth, and 5.2 mi southeast of Clam Gulch.	7.58	1978-80	3- 3-80 7-24-80 9- 3-80	3.8 b2.1 b3.9
15241530	Ninilchik River above tributary 2 near Ninilchik	Lat 60°06'25", long 151°28'56", in SE¼ NE¼ sec.10, T.1 S., R.13 W., Kenai Peninsula Borough, 10 ft upstream from unnamed right bank tributary, and 7.5 mi northeast of Ninilchik.	46.2	1978-80	3- 4-80 7-24-80 9- 3-80	29 b28 b36
15241540	Ninilchik River tributary 2 at mouth near Ninilchik	Lat 60°06'26", long 151°28'57", in SE¼ NE¼ sec.10, T.1 S., R.13 W., Kenai Peninsula Borough, 10 ft upstream from mouth, and 7.5 mi northeast of Ninilchik.	6.08	1978-80	3- 4-80 7-24-80 9- 3-80	3.0 b3.6 b5.0
15241550	Ninilchik River above tributary 3 near Ninilchik	Lat 60°03'24", long 151°32'53", in SW¼ SE¼ sec.29, T.1 S., R.13 W., Kenai Peninsula Borough, 300 ft upstream from unnamed left bank tributary, and 4.0 mi east of Ninilchik.	59.2	1978-80	3- 4-80 7-24-80 9- 3-80	47 b37 b43
15241570	Ninilchik River tributary 3 near Ninilchik	Lat 60°05'27", long 151°19'44", in SW¼ NW¼ sec.15, T.1 S., R.12 W., Kenai Peninsula Borough, 100 ft downstream from unnamed right bank tributary, and 12 mi east of Ninilchik.	22.7	1978-80	3- 4-80 7-24-80 9- 3-80	7.6 b6.9 b7.6
15241590	Ninilchik River tributary 3 at mouth near Ninilchik	Lat 60°03'26", long 151°32'48", in SW¼ SE¼ sec.29, T.1 S., R.13 W., Kenai Peninsula Borough, 300 ft upstream from mouth, and 4.0 mi east of Ninilchik.	56.8	1978-80	3- 4-80 7-24-80 9- 3-80	28 b24 b25
15242080	Crooked Creek near Clam Gulch	Lat 60°08'16", long 151°10'30", in SE¼ NW¼ sec.34, T.1 N., R.11 W., Kenai Peninsula Borough, 500 ft downstream from unnamed left bank tributary, and 9.8 mi southeast of Clam Gulch.	21.9	1978-80	3- 4-80 7-24-80 9- 3-80	20 b24 b25
15242100	Crooked Creek near Kasilof	Lat 60°17'50", long 151°16'20", in NE¼ sec.1, T.2 N., R.12 W., Kenai Peninsula Borough, 50 ft downstream from culvert at Old Sterling Highway, 1.8 mi upstream from mouth, and 6.5 mi southeast of Kasilof.	53.8	a1951-52, a1973-77, 1978-80	3- 3-80 7-22-80 9- 2-80	44 b56 b53
†15294007	Deception Creek above tributary near Houston	Lat 61°41'48", long 149°46'19", in SE¼ NW¼ sec.35, T.19 N., R.3 W., Matanuska-Susitna Borough, 0.2 mi upstream from unnamed left bank tributary and 4.8 mi northeast of Houston.	17.9	1978-80	10-24-79 4- 2-80	b18 b5.5
†15294008	Deception Creek tributary near Houston	Lat 61°41'40", long 149"46'21", in SE¼ NW¼ sec.35, T.19 N., R.3 W., Matanuska-Susitna Borough, 0.1 mi upstream from mouth and 4.7 mi northeast of Houston.	8.89	1978-80	10-24-79 4- 2-80	b7.7 b3.1
†15294012	Willow Creek at Parks Highway	Lat 61°46'03", long 150°03'48", in SW¼ NE¼ sec.6, T.19 N., R.4 W., Matanuska-Susitna Borough, at bridge at Parks Highway, 0.9 mi downstream from Deception Creek, and 1.7 mi northwest of Willow.	233	1978-80	10-25-79 4- 1-80	333 b136

† See analyses of samples collected at miscellaneous sites.
a Published in miscellaneous measurements table.
b Base flow.

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Measurements	
					Date	Discharge (ft³/s)
		Yukon Alaska				
15514005	Isabella Creek near Fairbanks	Lat 64°53'10", long 147°40'30", in NE¼ NE¼SE¼ sec.26, T.1 N., R.1 W., Fairbanks North-Star Borough, at downstream end of culvert at mi 1.0 on Farmers Loop Road, 2.8 mi upstream from mouth and 3.1 mi north of Fairbanks.	c4.3	1976-80	10- 2-79	b0.14
15514010	Jusilla Creek near Fairbanks	Lat 64°53'59", long 147°42'59", in NE¼ NW¼SE¼ sec.22, T.1 N., R.1 W., Fairbanks North-Star Borough, at downstream end of culvert at mi 3.4 on Farmers Loop Road, 0.5 mi upstream from Creamers Field and 3.9 mi north of Fairbanks.	c1.6	1976-80	10- 27-79	b0.05
15514015	Grenac Creek near Fairbanks	Lat 64°53'53", long 147°45'13", in SE¼ NW¼SE¼ sec.21, T.1 N., R.1 W., Fairbanks North-Star Borough, at downstream end of culvert at mi 4.6 on Farmers Loop Road, 1.0 mi upstream from Creamers Field and 3.9 mi north of Fairbanks.	c1.3	a1967-68, 1976-80	10- 2-79	b0.05
15514023	Ester Creek near Ester	Lat 64°50'37", long 147°59'54", in SE¼ SE¼NW¼ sec.8, T.1 S., R.2 W., Fairbanks North Star Borough, 25 ft downstream from culvert on Parks Highway and 0.5 mi east of Ester.	c8.6	1979-80	10- 2-79	b0.12
15514025	Eva Creek near Ester	Lat 64°50'47", long 147°59'34", in SW¼ NW¼NE¼ sec.8, T.1 S., R.2 W., Fairbanks North-Star Borough, 20 ft downstream from culvert on Parks Highway, 0.1 mi upstream from mouth, and 0.7 mi east of Ester.	c1.3	1978-80	10- 2-79	b0.07
15514040	Happy Creek near College	Lat 64°51'47", long 147°52'22", in NW¼ NW¼NW¼ sec.1, T.1 S., R.2 W., Fairbanks North-Star Borough, 20 ft upstream from culvert on Parks Highway, at Ester Crossing, 0.6 mi upstream from mouth, and 2 mi west of College.	c8.6	1978-80	10- 2-79	b0.19
15540035	O'Conner Creek near College	Lat 64°54'57", long 147°53'49", in SE¼ SE¼NW¼ sec.14, T.1 N., R.2 W., Fairbanks North-Star Borough, at bridge on Goldstream Road, 1.8 mi upstream from mouth, and 5 mi northwest of College.	12.4	a1967, 1978-80	10- 2-79	b0.31
15540040	Goldstream Creek near College	Lat 64°54'36", long 147°56'47", in SE¼ SE¼SE¼ sec.16, T.1 N., R.2 W., Fairbanks North-Star Borough, 100 ft downstream from bridge on Sheep Creek Road, 1.6 mi northwest of Happy, and 5.5 mi northwest of College.	96.7	a1967, 1978-80	10- 2-79	b18
15540045	Moose Creek near Happy	Lat 64°55'30", long 147°59'10", in NW¼ SE¼SE¼ sec.8, T.1 N., R.2 W., Fairbanks North-Star Borough, 20 ft upstream from bridge on Murphy Dome Road, 1 mi upstream from mouth, and 3 mi northwest of Happy.	10.6	a1967, 1978-80	10- 2-79	b0.48

a Published in miscellaneous measurements table.
b Base flow.
c Approximately.

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1980

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (ft)	Annual maximum Discharge (ft^3/s)
		Southeast Alaska					
15054500	Bessie Creek near Auke Bay	Lat 58°35'30", long 134°54'00", in SE¼ sec.7, T.38 S., R.63 E., Juneau Borough, 1000 ft upstream from mouth of Yankee Cove on eastern shore of Lynn Canal, and 16.5 mi northwest of Auke Bay.	1.35	1967-80	10- 9-79	13.40	240
15057500	William Henry Creek near Auke Bay	Lat 58°44'46", long 135°14'25", about 600 ft upstream from mouth on western shore of Lynn Canal about 2 mi north of entrance to William Henry Bay, and 33 mi northwest of Auke Bay.	1.58	1967-70, 1972, 1974-77, 1979	1980	(a)	(a)
15081490	Yatuk Creek near Klawock	Lat 55°53'57", long 133°08'42", on Prince of Wales Island, in Tongass National Forest, 0.4 mi upstream from mouth at Naukati Bay, and 24 mi north of Klawock.	5.80	1971-80	10- -79	23.06	2,860
15081890	Natzuhini Creek near Hydaburg	Lat 55°17'18", long 132°49'18", in NE¼NE¼ sec.17, T.76 S., R.83 E., on Prince of Wales Island, in Tongass National Forest, 0.7 mi upstream from mouth at Natzuhini Bay, and 5.5 mi north of Hydaburg.	9.10	1971-74, 1976-80	10- -79	21.39	1,270
15086900	Red Creek near Point Baker	Lat 56°15'36", long 133°19'34", on Prince of Wales Island, in Tongass National Forest, 0.2 mi upstream from Red Bay tideflats, and 13 mi southeast of Point Baker.	11.2	1971-80	10- -79	18.24	965
15087250	Twin Creek near Petersburg	Lat 56°43'13", long 132°55'33", in NE¼NW¼ sec.35, T.59 S., R.79 E., on Mitkof Island, at Mitkof highway bridge 600 ft upstream from mouth at Wrangell Narrows and 6.5 mi south of Petersburg.	3.01	1967-77, 1979-80	10- -79	10.83	565
15087585	Twelvemile Creek near Petersburg	Lat 56°58'07", long 133°04'05", in NW¼SE¼ sec.31, T.56 S., R.77 E., on Kupreanof Island, in Tongass National Forest, 0.8 mi upstream from mouth at Fredrick Sound, and 10 mi northwest of Petersburg.	9.39	1973-77, 1979-80	10- -79	9.39	1,230
15087595	Kadake Creek near Kake	Lat 56°46'45", long 134°00'42", in W½ SW¼ sec.1, T.59 S., R.72 E., on Kuiu Island, in Tongass National Forest, 1.5 mi upstream from mouth at Kadake Bay and 15 mi south of Kake.	43.6	1972-76, 1980	10- -79	104.16	12,700
15107000	Kadashan River near Tenakee	Lat 57°41'43", long 135°12'50", in SE¼NW¼ sec.21, T.48 S., R.53 E., on Chichagof Island, in Tongass National Forest, 700 ft downstream from Tonalite Creek, 0.5 mi upstream from mouth, and 7 mi south of Tenakee.	37.7	1964-79‡, 1980	10- 9-79	11.42	8,100
15108250	Game Creek near Hoonah	Lat 58°03'02", long 135°29'21", in SE¼SE¼ sec.18, T.44 S., R.61 E., on Chichagof Island, in Tongass National Forest, 2 mi upstream from mouth and 4.5 mi southwest of Hoonah.	42.8	1970-77, 1979-80	10- -79	13.97	8,780

‡ Operated as a continuous-record station.

a Unknown.

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Southeast Alaska--Continued					
15108290	Gos Creek near Elfin Cove	Lat 58°11'49", long 136°03'07", in NW¼SW¼ sec.26, T.42 S., R.58 E., on Chichagof Island, in Tongass National Forest, 0.5 mi upstream from mouth behind Goose Island in Mud Bay and 11 mi east of Elfin cove.	16.7	1974-77, 1979-80	9-24-80	48.41	7,620
		South-central Alaska					
15198500	Station Creek near Mentasta	Lat 62°56'12", long 143°39'54", in SW¼ sec.2, T.13 N., R.9 E., on left bank, 0.3 mi upstream from wooden bridge on Mentasta Village Road, 1 mi west of Slana-Tok Highway, and 4 mi east of Mentasta.	15.3	1970-77, 1979-80	7- -79 6- -80	11.45 11.78	b140 180
15199000	Copper River Tributary near Slana	Lat 62°43'03", long 144°14'21", in SW¼ sec.23, T.11 N., R.6 E., on right bank 20 ft upstream from culvert at mi 51.8 on the Slana-Tok Highway and 9 mi west of Slana.	4.32	1963-80	6- -80	14.24	205
15201000	Dry Creek near Glennallen	Lat 62°08'49", long 145°28'31", in NE¼ sec.7, T.4 N., R.1 W., on right bank 500 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen. (Formerly at culvert.)	11.4	1963-80	5- -80	c16.04	30
15201100	Little Nelchina River Tributary near Eureka Lodge	Lat 61°59'17", long 147°00'34", in NW¼ sec.2, T.2 N., R.10 W., Matanuska Susitna Borough, on right bank at mi 132 Glenn Highway and 6 mi northeast of Eureka Lodge.	7.81	1965-80	5- -80	11.55	73
15208100	Squirrel Creek at Tonsina	Lat 61°40'05", long 145°10'26", in NW¼ sec.26, T.2 S., R.1 E., on right bank 150 ft upstream from highway bridge at mi 79.5 Richardson Highway, 0.3 mi northeast of Tonsina River bridge, 0.3 mi upstream from mouth, and 0.4 mi north of Tonsina.	70.5	1964-65, 1966-75‡, 1976-80	6- -76 6-16-77 5- 2-79 6-10-80	1.73 2.06 2.12 2.28	d270 d375 d395 460
15208200	Rock Creek near Tonsina	Lat 61°45'32", long 145°09'14", in NW¼ sec.25, T.1 S., R.1 E., on right bank at mi 86.1 Richardson Highway, and 6.7 mi north of Tonsina Lodge.	14.3	1966-80	5- -80	9.85	58
15209000	Chititu Creek near May Creek	Lat 61°22'12", long 142°40'50", in NW¼ sec.11, T.6 S., R.15 E., on right bank 10 ft below wooden bridge on May Creek-Dan Creek Road and 2 mi north of May Creek landing strip.	30.9	1973-80	6- -80	5.35	360
15209100	May Creek near May Creek	Lat 61°20'42", long 142°41'49", in SE¼ sec.15, T.6 S., R.15 E., on left bank 100 ft west of the May Creek-Dan Creek Road and 0.3 mi northwest of the north end of the May Creek landing strip.	10.4	1973-80	6- -80	5.31	35
15211700	Strelna Creek near Chitina	Lat 61°30'40", long 144°04'00", in NE¼ sec.22, T.4 S., R.7 E., 300 ft upstream from timber bridge on Chitina-McCarthy Road and 13 mi east of Chitina.	23.8	1971-80	6- 8-80	9.91	250
15211900	O'Brien Creek near Chitina	Lat 61°28'59", long 144°27'23", in NW¼NW¼ sec.35, T.4 S., R.5 E., 100 ft upstream from timber bridge on trail to Copper River gaging station, 0.1 mi upstream from mouth at Copper River, and 2.5 mi south of Chitina.	44.8	1970-80	6- 6-80	4.78	700
15212500	Boulder Creek near Tiekel	Lat 61°20'08", long 145°18'26", in NW¼ sec.19, T.6 S., R.1 E., on right upstream wingwall at mi 51.4 Richardson Highway, and 0.7 mi north of Tiekel.	9.80	1964-80	6- -80	8.42	155

‡ Operated as a continuous-record station.
b Not previously published.
c At new site and datum.
d Revised.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1980--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft³/s)
		South-central Alaska--Continued					
15236200	Shakespeare Creek at Whittier	Lat 60°46'35", long 148°43'35", in NE¼ sec.22, T.8 N., R.4 E., on upstream right wingwall of concrete bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska railroad terminal building at Whittier.	3.05	1970-80	6- -80	12.19	530
152374000	Chalmers River near Cordova	Lat 60°13'10", long 147°13'30", in SE¼ sec.32, T.1 N., R.13 E., on Montague Island, 1.2 mi upstream from mouth at Port Chalmers, and 58 mi southwest of Cordova.	6.32	1967-73, 1975-80	7-28-80	11.48	1,400
15238600	Spruce Creek near Seward	Lat 60°04'10", long 149°27'08", on left bank 0.7 mi upstream from mouth at Resurrection Bay and 2.4 mi south of Seward.	9.26	1966, 1967-79‡, 1980	8- -80	8.45	1,960
*15239500	Fritz Creek near Homer	Lat 59°42'30", long 151°20'35", in SW¼ sec.28, T.5 S., R.12 W., Kenai Peninsula Borough, on left bank 200 ft above culvert on East Road and 9 mi northeast of Homer.	10.4	1963-80	11- 8-79	16.96	190
*15239800	Diamond Creek near Homer	Lat 59°40'10", long 151°40'00", in SE¼ sec.9, T.6 S., R.14 W., Kenai Peninsula Borough, on right upstream wingwall of culvert on Sterling Highway 1.3 mi upstream from mouth at Cook Inlet and 4.6 mi northwest of Homer.	5.35	1963-80	11- 8-79	12.39	150
15240500	Cook Inlet Tributary near Ninilchik	Lat 59°58'45", long 151°43'20", in NE¼ sec.29, T.2 S., R.14 W., Kenai Peninsula Borough, on left upstream culvert wingwall on Sterling Highway 0.2 mi upstream from mouth at Cook Inlet and 5.4 mi southwest of Ninilchik.	5.19	1966-80	11- 8-79	13.22	85
15243950	Porcupine Creek near Primrose	Lat 60°20'30", long 149°22'15", in NE¼ sec.24, T.3 N., R.1 W., Kenai Peninsula Borough, on right bank at 18-mi campground road 0.2 mi upstream from mouth at Kenai Lake and 0.8 mi west of Primrose.	16.8	1963-80	7- -80	10.98	680
15254000	Crescent Creek near Cooper Landing	Lat 60°29'49", long 149°40'38", in NW¼ sec.29, T.5 N., R.3 W., Kenai Peninsula Borough, on left bank at bridge on Old Seward-Kenai Highway, 4.2 mi downstream from Crescent Lake, and 4.4 mi east of Cooper Landing.	31.7	1949-66‡, 1967-80	6- -80	12.33	740
15266500	Beaver Creek near Kenai	Lat 60°33'50", long 151°07'30", in SE¼ sec.36, T.6 N., R.11 W., on right bank 75 ft downstream from culvert on Kenai-Soldotna Road, 2.0 mi upstream from mouth, and 4.5 mi east of Kenai.	51.0	1968-78‡, 1980	4-10-80	2.48	216
15269500	Granite Creek near Portage	Lat 60°43'40", long 149°17'00", in NE¼ sec.4, T.7 N., R.1 E., Kenai Peninsula Borough, on upstream side of center pier of bridge on Seward-Anchorage Highway and 12 mi southwest of Portage.	28.2	1967-80	d10-11-78 10- 1-79	10.38 11.04	800 1,200
15271900	Cub Creek near Hope	Lat 60°52'12", long 149°26'02", in NW¼ sec.15, T.9 N., R.1 W., Kenai Peninsula Borough, on right wingwall of culvert on Hope Highway 0.1 mi upstream from mouth at Sixmile Creek and 7.7 mi southeast of Hope.	1.80	1965-79	1980	(a)	(a)
15272530	California Creek near Girdwood	Lat 60°57'53", long 149°08'02", in NW¼ sec.17, T.10 N., R.2 E., Municipality of Anchorage, at culverts on Alyeska Highway, 0.2 mi west of Girdwood Post Office, and 2.0 mi northeast of Seward-Anchorage Highway.	6.96	1967-80	7-12-80	16.38	270

* Also low-flow partial-record station.
‡ Operated as a continuous-record station.
a Unknown.
d Revised.

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		South-central Alaska--Continued					
15282400	Puritan Creek near Sutton	Lat 61°48'42", long 148°08'01", in NW¼ sec.23, T.20 N., R.7 E., Matanuska-Susitna Borough, on right bank below bridge at mi 89.3 Glenn Highway and 25.2 mi northeast of Sutton.	8.51	1963-66, 1968-80	5-20-80	7.35	60
15283500	Eska Creek near Sutton	Lat 61°43'44", long 148°54'31", in NE¼ sec.21, T.19 N., R.3 E., Matanuska-Susitna Borough, on right bank 100 ft below culverts on Eska-Jonesville Road and 1.5 mi northeast of Sutton.	13.4	1966, 1971-80	9-15-80	c7.70	500
15285000	Wasilla Creek near Palmer	Lat 61°38'47", long 149°11'45", in SW¼ sec.13, T.18 N., R.1 E., Matanuska-Susitna Borough, on left bank 60 ft upstream from culvert entrance on Wasilla Fishhook Road and 4.1 mi northeast of Palmer.	16.6	1971, 1976-80	9-15-80	12.60	350
15291100	Raft Creek near Denali	Lat 63°03'04", long 147°16'22", in SE¼ sec.36, T.21 S., R.2 E., Matanuska-Susitna Borough, on right bank above culverts at mi 69.2 Denali Highway and 10.7 mi southeast of Denali.	4.33	1963-77, 1979-80	7-28-80	10.90	102
15293000	Caswell Creek near Caswell	Lat 61°56'55", long 150°03'14", in SW¼ sec.32, T.22 N., R.4 W., Matanuska-Susitna Borough, below culvert on Parks Highway and 2.3 mi south of Caswell.	19.6	1963-80	9-15-80	c11.39	145
15294025	Moose Creek near Talkeetna	Lat 62°19'00", long 150°26'30", in NE¼ sec.30, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge on Petersville Road and 10.5 mi west of Talkeetna.	52.3	1972-80	10- 8-79	10.98	1,170
15297475	Red Cloud Creek Tributary near Kodiak	Lat 57°49'00", long 152°37'20", in SW¼ sec.24, T.27 S., R.21 W., Kodiak Island Borough, 0.1 mi upstream from mouth and 8.4 mi northwest of Kodiak.	1.51	1963-80	6- -80	12.72	360
		Southwest Alaska					
15300200	Roadhouse Creek near Iliamna	Lat 59°45'26", long 154°50'49", in SW¼ sec.11, T.5 W., R.32 W., 100 ft below culverts on Iliamna Road and 2.1 mi east of Iliamna airport. (Corrected location, gage moved prior to 1978 water year.)	20.8	1973-76, 1978-80	8- -80	12.38	280
15302900	Moody Creek at Aleknagik	Lat 59°16'34", long 158°35'42", in SE¼ sec.30, T.10 S., R.55 W., on left bank 12 ft upstream from culvert entrance and 500 ft upstream from mouth at Wood River at the Aleknagik Mission.	1.28	1969-73, 1975-80	6-13-80	18.22	23
15303010	Silver Salmon Creek near Aleknagik	Lat 59°13'34", long 158°40'21", in NW¼ sec.14, T.11 S., R.56 W., on right bank 4.5 mi upstream from mouth at Wood River and 4 mi southwest of Aleknagik.	4.46	1965-67, 1969-80	5- -80	e9.70	<120
		Yukon Alaska					
15305900	Dennison Fork near Tetlin Junction	Lat 63°25'24", long 142°29'00", in SW¼ sec.14, T.19 N., R.15 E., on right bank 10 ft upstream from culvert at mi 10.7 Taylor Highway and 8.3 mi northeast of Tetlin Junction.	2.93	1964-80	5- -80	11.36	24
15305920	West Fork Tributary near Tetlin Junction	Lat 63°40'03", long 142°16'00", in SW¼ sec.23, T.22 N., R.16 E., on left bank 7 ft upstream from culvert at mi 32 Taylor Highway and 26.5 mi northeast of Tetlin Junction.	1.02	1967-80	9-24-80	10.52	20

< Less than.
c At new site.
e Ice effect.

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Yukon Alaska--Continued					
15305950	Taylor Creek near Chicken	Lat 63°54'27", long 142°12'58", in NW¼ sec.35, T.25 N., R.16 E., on right bank 29 ft upstream from bridge at mi 50.3 Taylor Highway and 14.5 mi southwest of Chicken.	28.4	1967-80	9-24-80	10.16	43
15341900	North Fork King Solomon Creek near Eagle	Lat 64°32'23", long 141°15'00", in SE¼ sec.26, T.4 S., R.32 E., on left bank 1,000 ft upstream from bridge at mi 135.8 Taylor Highway and 18 mi south of Eagle.	18.5	1963, 1975-80	5-22-80	20.63	250
15344000	King Creek near Dome Creek	Lat 64°23'38", long 141°24'43", in SW¼ sec.16, T.6 S., R.32 E., on left bank at mile 120 Taylor Highway, 1000 ft upstream from culvert at mi 119.8 Taylor Highway 0.4 mi upstream from mouth at O'Brien Creek, 4.09 mi east of Dome Creek, and 29 mi south of Eagle.	5.99	1975-80	6- -80	12.12	54
15453610	Ray River Tributary near Stevens Village	Lat 65°56'57", long 150°55'00", in SE¼ sec.17, T.13 N., R.11 W., on right bank 10 ft upstream from culvert on TAPS haul road and 22 mi west of Stevens Village.	8.00	1977-80	6- 1-80	15.96	(f)
15457700	Erickson Creek near Livengood	Lat 65°34'30", long 148°56'18", in SE¼ sec.26, T.9 N., R.7 W., at culvert at mi 12.5 on the TAPS haul road and 12.5 mi northwest of Livengood.	26.3	1973-80	5- -80	c18.14	150
15470300	Little Jack Creek near Nabesna	Lat 62°32'47", long 143°19'30", in SE¼ sec.22, T.9 N., R.11 E., on left bank 0.2 mi upstream from wooden bridge at mi 25.8 Nabesna Road and 15.6 mi northwest of Nabesna.	6.73	1975-80	6-14-80	15.52	63
15470330	Chalk Creek near Nabesna	Lat 62°30'19", long 143°09'24", in NE¼ sec.3, T.8 N., R.12 E., on right bank 0.1 mi upstream from wooden bridge at mi 32.3 Nabesna Road and 10.3 mi northwest of Nabesna.	14.8	1975-80	6-14-80	17.40	250
15470340	Jack Creek near Nabesna	Lat 62°27'52", long 143°06'18", in NW¼ sec.24, T.8 N., R.12 E., on left bank 0.1 mi above bridge on Nabesna Road and 7 mi northwest of Nabesna.	115	1975-80	6-14-80	20.48	1,550
15471000	Bitters Creek near Northway Junction	Lat 63°09'38", long 142°05'20", in SE¼ sec.13, T.16 N., R.17 E., on left bank 52 ft upstream from culvert at mi 1,280 Alaska Highway 1 mi upstream from mouth at Tanana River and 13.5 mi northwest of Northway Junction.	15.4	1964, 1966-80	7- -80	12.04	135
15471500	Tanana River Tributary near Tetlin Junction	Lat 63°16'45", long 142°30'27", in SE¼ sec.3, T.17 N., R.15 E., on left bank 6 ft upstream from culvert at mi 1,297.8 Alaska Highway and 3.7 mi southeast of Tetlin Junction.	2.43	1965-80	9- -80	11.36	6.2
15473600	Log Cabin Creek at Log Cabin Inn	Lat 63°01'48", long 143°20'36", on right bank 20 ft upstream from bridge at mi 97.4 on the old section of the Slana-Tok Highway and 24.9 mi southwest of Tok.	10.7	1966-80	7- -80	10.36	210
15473950	Clearwater Creek near Tok	Lat 63°10'19", long 143°12'03", in NE¼ sec.18, T.16 N., R.11 E., 0.8 mi upstream from culverts at mi 109.5 Glenn Highway and 12.5 mi southwest of Tok.	36.4	1964-80	7- -80	45.60	125
15476049	Tanana River Tributary near Cathedral Rapids	Lat 63°24'24", long 143°48'28", in SE¼ sec.23, T.19 N., R.8 E., on left bank 0.3 mi upstream from culvert at mi 1,341 Alaska Highway 0.6 mi upstream from mouth at Tanana River and 2.5 mi northwest of Cathedral Rapids.	3.09	1970, 1973-80	1980	--	0

c At new site.
f To be determined.

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft³/s)
		Yukon Alaska--Continued					
15476200	Tanana River Tributary near Dot Lake	Lat 63°41'40", long 144°17'40", in NW¼ sec.17, T.22 N., R.6 E., on left bank 20 ft upstream from culvert at mi 1,369 Alaska Highway and 7.4 mi west of Dot Lake.	11.0	1964-80	9-22-80	10.67	34
15476400	Dry Creek near Dot Lake	Lat 63°41'32", long 144°34'16", in NW¼ sec.24, T.14 S., R.16 E., on piling near right bank 64 ft above bridge at mi 1,378.1 Alaska Highway 0.6 mi upstream from mouth at Tanana River and 15.7 mi west of Dot Lake.	57.6	1964-65, 1966-69‡, 1970-80	6- -80	12.50	270
15478010	Rock Creek near Paxson	Lat 63°04'16", long 146°06'17", in NW¼ sec.30, T.21 S., R.9 E., at mi 24.8 Denali Highway and 18 mi west of Paxson.	50.3	1963-80	6- -80	11.02	810
15478050	McCallum Creek near Paxson	Lat 63°13'27", long 145°38'56", in SW¼ sec.33, T.19 S., R.11 E., on right bank upstream wingwall 8 ft upstream from bridge at mi 202.4 Richardson Highway 0.5 mi upstream from mouth at Phelan Creek and 14.5 mi northwest of Paxson.	15.5	1967-80	5- -80	11.90	600
15480000	Banner Creek at Richardson	Lat 64°17'24", long 146°20'56", in SW¼ sec.22, T.7 S., R.7 E., Fairbanks North-Star Borough, on left bank 400 ft upstream from bridge at mi 295.4 Richardson Highway 0.1 mi upstream from mouth at Tanana River and 0.4 mi northwest of Richardson.	20.2	1963-80	7- -80	13.25	(f)
15490000	Monument Creek at Chena Hot Springs	Lat 65°03'17", long 146°03'05", in SE¼ sec.26, T.3 N., R.8 E., Fairbanks North-Star Borough , on left bank 800 ft from lodge at Chena Hot Springs, 0.4 mi upstream from unnamed tributary, and 1.3 mi upstream from North Fork Chena River.	26.7	1967, 1970-77, 1979-80	6-30-80	26.17	(f)
15515800	Seattle Creek near Cantwell	Lat 63°19'32", long 148°14'49", on line between sec.25 and 26, T.18 S., R.4 W., Matanuska-Susitna Borough, on left downstream wingwall of bridge at mi 110.9 Denali Highway and 22.4 mi southeast of Cantwell.	36.2	1964-65, 1966-75‡, 1976-77, 1979-80	6-19-79 6- -80	d4.86 4.90	390 360
15515900	Lily Creek near Cantwell	Lat 63°19'54", long 148°16'16", in NW¼ sec.26, T.18 S., R.4 W., Matanuska-Susitna Borough, 300 ft upstream from culvert at mi 11.9 Denali Highway and 20 mi southeast of Cantwell.	5.63	1965-77, 1979-80	6- 8-80	22.78	122
15516000	Nenana River near Windy	Lat 63°27'28", long 148°48'11", in NE¼ sec.12, T.17 S., R.7 W., Matanuska-Susitna Borough, near left bank under bridge on Denali Highway, 0.8 mi upstream from Jack River, 1 mi southeast of Windy railroad station, and 2 mi downstream from Schist Creek.	710	1950-56‡, 1958-73‡, 1974-77, 1979-80	6- 7-80	5.99	6,160
15516200	Slime Creek near Cantwell	Lat 63°30'34", long 148°48'39", in SE¼ sec.24, T.16 S., R.7 W., on left bank upstream from culvert on Parks Highway and 9.1 mi northeast of Cantwell.	6.90	1966-80	7- -80	13.15	192
15518200	Rock Creek near Ferry	Lat 64°01'56", long 149°08'40", in SW¼ sec.21, T.10 S., R.8 W., at midchannel 42 ft upstream from culverts on the Parks Highway 0.3 mi upstream from mouth and 1.4 mi northwest of Ferry.	8.17	1965, 1967, 1970-75, 1977-80	6-18-19-80	13.90	938
15518250	Birch Creek near Rex	Lat 64°10'35", long 149°17'26", in SW¼ sec.35, T.8 S., R.9 W., on left bank 20 ft upstream from culvert on the Parks Highway and 4.2 mi south of Rex.	4.10	1965-80	9- -77 6-18-80	d8.78 12.97	d18 300

‡ Operated as a continuous-record station.
d Revised.
f To be determined.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1980--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft³/s)
		Yukon Alaska--Continued					
15519200	Brooks Creek Tributary near Livengood	Lat 65°23'02", long 148°56'12", on line between sec.2, T.6 N., R.7 W., and sec. 35, T.7 N., R.7 W., on right bank 20 ft upstream from culvert at mi 84 Elliot Highway and 15 mi southwest of Livengood.	7.81	1964-80	5- -80	9.18	40
15520000	Idaho Creek near Miller House	Lat 65°21'13", long 146°09'33", in NW¼ sec.17, T.6 N., R.8 E., Fairbanks North-Star Borough, on right bank 100 ft downstream from culverts at mi 79 Steese Highway and 30 mi southwest of Miller House.	5.31	1963-80	6-30-80	15.09	163
15541600	Globe Creek near Livengood	Lat 65°17'08", long 148°07'56", 0.1 mi upstream from culverts at mi 38 Elliot Highway 9 mi upstream from mouth and 19 mi southeast of Livengood.	23.0	1964-80	7- -80	12.96	70
15564868	Snowden Creek near Wiseman	Lat 67°44'16", long 149°45'10", in SW¼ sec.26, T.34 N., R.10 N., on right bank 20 ft upstream from culvert on the Dalton Highway and 24.5 mi northeast of Wiseman.	16.7	1968, 1977-80	7- -80	23.99	300
15564872	Nugget Creek near Wiseman	Lat 67°29'25", long 149°52'20", in NW¼ sec.3, T.31 N., R.10 W., on right bank 300 ft upstream from culvert at the Dalton Highway and 8.7 mi northeast of Wiseman.	9.47	1975-80	5- -80	15,50	96
15564875	Middle Fork Koyukuk River near Wiseman	Lat 67°26'18", long 150°04'30", in SE¼ sec.7, T.30 N., R.11 W., near midspan on downstream side of bridge on Dalton Highway, 1.4 mi upstream from Minnie Creek, 1.9 mi downstream from Hammond River, 2.1 mi north of Wiseman and 2.5 mi upstream from Wiseman Creek.	1,200	1968, 1971-78‡, 1979-80	5- -80	10.63	18,900
15564884	Prospect Creek near Prospect Camp	Lat 66°46'56", long 150°41'06", in NW¼ sec.31, T.23 N., R.14 W., on left bank 200 ft upstream from bridge on the Dalton Highway, 0.4 mi downstream from TAPS pipeline crossing, 1.5 mi upstream from mouth, and 2.1 mi south of Pump Station 5.	110	1968, 1975-80	8- -80	7.15	1,500
15564887	Bonanza Creek Tributary near Prospect Camp	Lat 66°36'52", long 150°41'24", in SE¼ sec.25, T.21 N., R.15 W., on right bank 0.3 mi downstream from culverts on the Dalton Highway, 3.4 mi upstream from mouth, and 13.5 mi south of Pump Station 5.	11.7	1975-80	5- -80	17.38	90
		Northwest Alaska					
15585000	Goldengate Creek near Nome	Lat 64°26'03", long 165°02'46", in SW¼ sec.15, T.12 S., R.32 W., on right bank 500 ft upstream from culvert on Nome-Council Road and 11 mi southeast of Nome.	1.55	1965, 1977-80	6-20-80	11.15	17
15619000	Dexter Creek near Nome	Lat 64°35'11", long 165°16'39", in NE¼ sec.33, T.10 S., R.33 W., on left bank 800 ft upstream from culvert on Nome-Teller Road 0.2 mi upstream from mouth and 7 mi northeast of Nome.	2.99	1978	6- -80	e16.77	(a)
15624998	Arctic Creek above tributary near Nome	Lat 64°38'16", long 165°42'42', in NE¼ sec.8, T.10 S., R.35 W., on right bank 300 ft upstream from culvert on Nome-Teller Road 2 mi upstream from mouth and 13 mi northwest of Nome.	1.13	1975, 1979-80	8- 4-79 7- -80	17.95 18.26	d24 51
15633000	Washington Creek near Nome	Lat 64°42'52", long 165°49'13", in NW¼ sec.14, T.9 S., R.35 W., 400 ft upstream from culvert on Nome-Teller Road and 19 mi northwest of Nome. (Gage moved July 12, 1979.)	6.34	1964-80	d8- 4-79 7- -80	c20.06 c20.39	(f) (f)

‡ Operated as a continuous-record station.
a Unknown.
c At new site.
d Revised.
e Ice effect.
f To be determined.

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (ft)	Annual maximum Discharge (ft^3/s)
		Northwest Alaska--Continued					
15668100	Star Creek near Nome	Lat 64°55'40", long 164°57'39", in NW¼ sec.33, T.6 S., R.31 W., on right bank upstream from culvert at mi 40.5 Nome-Taylor road 0.9 mi upstream from mouth and 32 mi northeast of Nome.	3.78	1964-65, 1967-80	7- 3-79 6-19-80	10.16 10.98	d64 100
		Arctic Slope Alaska					
15906000	Sagavanirktok River Tributary near Pump Station 3	Lat 68°41'13", long 149°05'42", in NE¼SW¼ sec.4, T.9 S., R.13 E., North-Slope Borough on left bank 30 ft upstream from culverts on Dalton Highway, 16.5 mi upstream from mouth, and 14 mi south of Pump Station 3.	28.4	1979-80	7- -80	19.67	(f)
15910200	Happy Creek at Happy Valley	Lat 69°08'50", long 148°49'50", in SE¼ sec.30, T.3 S., R.14 E., North-Slope Borough, on right bank at Happy Valley Camp 1 mi upstream from mouth and 17.5 mi south of Sagwon.	34.5	1972-80	6- -80	16.79	840

d Revised.
f To be determined.

Discharge measurements made at miscellaneous sites during water year 1980

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Southeast Alaska				
15081620 Klawak River	Klawak Harbor	Lat 55°32'56", long 133°02'54", in SE¼SE¼ sec.11, T.73 S., R. 81 E., on Prince of Wales Island, on right bank 0.1 mi downstream from Klawak Lake outlet, 1.1 mi upstream from mouth at Klawak Harbor, and 2.0 mi east of Klawock.	46.1	1947, 1976, 1977‡	3-05-80	167
Crab Creek	Crab Bay	Lat 55°30'15", long 133°06'18", in SE¼SE¼ sec.28, T.73 S., R. 80 E., on Prince of Wales Island, 2.5 mi northeast of Craig, and 3 mi south of Klawock.	2.94	--	3-04-80 6-12-80 6-24-80 6-25-80	18 10 19 13
Crab Creek	Crab Bay	Lat 55°29'08", long 133°07'24", in SE¼NE¼ sec.5, T.74 S., R.81 E., on Prince of Wales Island, upstream from road, 0.1 mi from mouth, and 1 mi northeast of Craig.	4.86	--	(Listed below)	

3-05-80	18	6-24-80	22	7-15-80	a25	8-12-80	a9.8	9-09-80	a99
6-12-80	9.9	6-25-80	13	7-22-80	a81	8-19-80	a31	9-16-80	a11
6-17-80	a18	7-01-80	a8.7	7-29-80	a28	8-26-80	a18	10-14-80	a23
6-23-80	8.2	7-08-80	a8.1	8-05-80	a28	9-02-80	a31		

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Date	Discharge (ft^3/s)
Lake Saint Nicholas outlet	Port Saint Nicholas	Lat 55°26'00", long 132°55'17", in SE¼SE¼ sec.22, T.74 S., R.82 E., on Prince of Wales Island, at outlet, 5 mi upstream from mouth, and 9 mi east of Craig.	3.34	--	3-04-80	20
McGilvery Creek	Salmon Lake	Lat 55°34'10", long 132°42'31", in SW¼NE¼ sec.6, T.73 S., R.83 E., on Prince of Wales Island, 300 ft upstream from mouth and 12 mi west of Kasaan.	12.8	--	3-04-80	60
Salmon Creek	Karta Lake	Lat 55°34'15", long 130°38'02", in SW¼NW¼ sec.3, T.73 S., R.84 E., on Prince of Wales Island, 0.4 mi downstream from Salmon Lake outlet and 9.5 mi west of Kasaan.	28.2	--	3-04-80	443
•15086912 Navy Creek near Meyers Chuck	Burnett Inlet	Lat 56°03'42", long 132°26'58", in SW¼SW¼ NW¼ sec.17, T.67 S., R.84 E., on Etolin Island, 0.1 mi upstream from mouth, 24 mi north of Meyers Chuck, and 28 mi south of Wrangell.	8.45	--	(Furnished by U.S. Forest Service and listed below)	

9-30-76	139	5-16-78	58	7-24-78	22	9-14-78	28	7-25-79	39
9-15-77	18	5-17-78	99	9-11-78	9.7	9-15-78	100	4-13-80	100
4-25-78	48	7-21-78	30	9-12-78	10	2-08-79	22	7-15-80	56
4-26-78	99	7-23-78	19	9-13-78	28	5-09-79	46		

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Date	Discharge (ft^3/s)
•15087110 Zarembo Creek near Point Baker	Clarence Strait	Lat 56°20'17", long 132°59'47", in NW¼SW¼ NW¼ sec.7, T.64 S., R.80 E., on Zarembo Island, 2.0 mi upstream from mouth, 24 mi east of Point Baker, and 25 mi southwest of Wrangell.	1.27	--	(Furnished by U.S. Forest Service and listed below)	

11-24-76	4.3	10-28-77	14	9-28-78	17	4-13-79	5.6	6-12-79	1.1
6-02-77	b0.3	3-08-78	12	9-28-78	36	5-04-79	20	7-22-79	30
6-17-77	b0.3	3-09-78	b20	9-29-78	11	5-05-79	6.4	8-29-79	b0.05
7-07-77	b0.3	5-23-78	b0.8	10-01-78	2.5	5-06-79	4.0	9-20-79	0.96
7-25-77	1.7	6-26-78	5.0	10-02-78	38	5-08-79	3.5	10-19-79	1.0
8-08-77	b0.2	6-26-78	8.8	10-24-78	9.0	5-09-79	2.4	1-29-80	0.97
8-23-77	0.48	6-27-78	2.3	10-25-78	61	5-10-79	3.7	4-10-80	2.4
9-22-77	20	6-29-78	0.99	10-26-78	6.8	5-14-79	2.8	7-28-80	0.93
10-21-77	1.4	7-19-78	b0.5	4-04-79	1.0	5-15-79	1.7		

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Date	Discharge (ft^3/s)
15087545 Municipal Watershed Creek near Petersburg	Frederick Sound	Lat 56°46'42", long 132°55'00", in NE¼NW¼ NE¼ sec.11, T.59 S., R.79 E., on Mitkof Island, 0.5 mi upstream from Petersburg Reservoir and 2.3 mi southeast of Petersburg. (See page 68 of this report.)	2.20	--	(Furnished by U.S. Forest Service and listed below)	

5-09-77	8.3	7-15-77	6.6	8-30-77	2.3	10-18-77	79	7-12-78	9.4
5-26-77	9.5	7-22-77	12	9-06-77	2.2	4-20-78	11	8-31-78	62
6-10-77	11	8-04-77	2.4	9-21-77	3.0	5-01-78	50	9-01-78	15
6-29-77	b7	8-10-77	1.2	9-28-77	1.6	5-26-78	21	9-19-78	116
7-06-77	b4	8-18-77	0.68	10-13-77	55	6-01-78	39	9-21-78	31

‡ Operated as a continuous-record station.
• See analysis of samples collected at water-quality partial-record stations.
a Discharge from rating curve.
b Estimated.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Southeast Alaska--Continued				
Keku Creek	Keku Strait	Lat 56°44'12", long 133°39'54", in SE¼ sec.19, T.59 S., R.75 E., on Kupreanof Island, just upstream from Irish Creek, about 1.5 mi upstream from mouth, and 20 mi southeast of Kake.	40.0	--	10- -79	†6,810
/Greens Creek	Hawk Inlet	Lat 58°05'02", long 134°37'14", on Admiralty Island, about 200 ft upstream from Big Sore Creek, 7.0 mi upstream from mouth, and 19 mi southwest of Juneau.	--	--	5-23-80 9-23-80	53 94
/Big Sore Creek	Greens Creek	Lat 58°05'00", long 134°37'19", on Admiralty Island, about 150 ft upstream from mouth, and 19 mi southwest of Juneau.	--	1978-79	5-23-80 9-23-80	8.0 15
/East Mine Drainage Creek	Greens Creek	Lat 58°05'00", long 134°37'33", on Admiralty Island, about 75 ft upstream from mouth and 19 mi southwest of Juneau.	--	1979	5-23-80 9-23-80	0.47 0.98
/Upper West Mine Drainage Creek	Greens Creek	Lat 58°04'38", long 134°37'40", on Admiralty Island, about 0.5 mi upstream from mouth, and 19 mi southwest of Juneau.	--	--	5-23-80 9-23-80	b0.01 b0.01
/West Mine Drainage above Tributary	West Mine Drainage Creek	Lat 58°04'47", long 134°37'56", on Admiralty Island, about 300 ft above West Mine Drainage Creek, 19 mi southwest of Juneau.	--	1979	5-22-80 9-23-80	0.07 0.16
/West Mine Drainage Creek	Greens Creek	Lat 58°04'55", long 134°38'05", on Admiralty Island, about 100 ft upstream from mouth, 6.4 mi upstream from mouth and 19 mi southwest of Juneau.	--	1979	5-22-80 9-23-80	0.45 0.68
/Greens Creek	Hawk Inlet	Lat 58°04'44", long 134°38'37", on Admiralty Island, about 200 ft upstream from Gallagher Creek, 6.1 mi upstream from mouth and 19 mi southwest of Juneau.	--	1978-79	5-22-80	59
		South-Central Alaska				
#15208100 Squirrel Creek at Tonsina	Tonsina River	Lat 61°40'05", long 145°10'26", in NW¼ sec.26, T.2 S., R.1 E., 150 ft upstream from highway bridge at mi 79.5 Richardson Highway, 0.3 mi northeast of Tonsina River bridge, 0.3 mi upstream from mouth, and 0.4 mi north of Tonsina.	70.5	1964-65 1965-75‡, 1976-77	5-08-80 5-08-80 5-09-80	126 147 175
Power Creek	Eyak Lake	Lat 60°37'45", long 145°32'29", in SW¼NW¼ sec.26, T.14 S., R.2 W., 3 mi above Ohman Falls and 9.2 mi northeast of Cordova.	--	--	2-28-80	24
Power Creek	Eyak Lake	Lat 60°35'38", long 145°34'40", in NE¼SE¼ sec.4, T.14 S., R.2 W., 0.75 mi above Ohman Falls and 6.8 mi northeast of Cordova.	--	--	2-28-80	64
#15236200 Shakespeare Creek at Whittier	Passage Channel	Lat 60°46'35", long 148°43'35", in NE¼ sec.22, T.8 N., R.4 E., on upstream right wingwall of concrete bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska railroad terminal building at Whittier.	3.05	--	(Listed below)	

9-17-69	16	6-30-72	35	8-17-73	30	8-05-75	63	6-13-77	55
5-19-70	14	7-31-72	55	9-25-73	20	9-03-75	24	7-12-77	76
7-31-70	176	9-08-72	40	7-03-74	52	6-08-76	37	5-31-78	115
6-08-71	18	9-26-72	4.2	9-30-74	6.8	8-09-76	156	7-20-78	88
8-06-71	99	6-27-73	54	7-01-75	87	9-24-76	103	9-17-79	65
5-19-72	9.0								

‡ Operated as a continuous-record station.
/ See analysis of samples collected at miscellaneous sites.
# Also crest-stage partial-record station.
† Measurement of peak flow.
b Estimated.

Discharge measurements made at miscellaneous sites during water year 1980

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		South-Central Alaska--Continued				
Fourth of July Creek	Resurrection Bay	Lat 60°05'51", long 149°18'11", in NE¼NE¼ sec.17, T.1 S., R.1 E., 50 ft downstream from unnamed right bank tributary, river mi 1.8 and 4.7 mi east of Seward.	23.8	1979	8-27-80	362
/Fourth of July Creek	Resurrection Bay	Lat 60°05'24", long 149°19'29", in NW¼SW¼ sec.17, T.1 S., R.1 E., river mi 0.9 and 4.1 mi east of Seward.	--	1979	8-27-80	341
Nuka River	Nuka Bay	Lat 59°40'56", long 150°42'05", 0.3 mi downstream from Nuka Glacier, 4 mi southwest of Bradley Lake, and 30 mi east of Homer.	--	--	10-23-79 3-11-80 7-18-80 8-19-80	0.46 b2.0 7.2 3.6
+15238995 Kachemak Creek	Bradley Lake	Lat 59°43'57", long 150°46'09", in SW¼NW¼ sec.23, T.5 S., R.9 W., 0.1 mi above mouth at Bradley Lake and 27 mi east of Homer.	--	--	10-23-79 1-08-80 3-11-80 6-10-80 7-17-80	143 17 1.4 659 1,050
#15240500 Cook Inlet tributary near Ninilchik	Cook Inlet	Lat 59°58'45", long 151°43'20", in NE¼ sec.29, T.2 S., R.14 W., Kenai Peninsula Borough, on left upstream culvert wingwall on Sterling Highway 0.2 mi upstream from mouth at Cook Inlet and 5.4 mi southwest of Ninilchik.	5.19	1967-77	4-09-80 5-01-80	24 9.4
#15269500 Granite Creek near Portage	East Fork Sixmile Creek	Lat 60°43'40", long 149°17'00", in NE¼ sec.4, T.7 N., R.1 E., at bridge on Seward-Anchorage Highway and 12 mi southwest of Portage.	28.2	1967-79	6-09-80 8-05-80	572 299
Canyon Creek	Sixmile Creek	Lat 60°46'49", long 149°25'37", in SW¼SE¼ sec.15, T.8 N., R.1 W., at bridge on Anchorage-Seward Highway, about 16 mi southwest of Portage.	--	1948	10-19-79	333
/Potter Creek	Cook Inlet	Lat 61°02'56", long 149°44'13", in NW¼NW¼ sec.13, T.11 N., R.3 W., Municipality of Anchorage, and 13 mi southeast of Anchorage.	1.57	--	10-24-79 3-25-80	1.3 0.52
/Potter Creek at Ravine Park	Cook Inlet	Lat 61°03'13", long 149°45'33", in SE¼SW¼ sec.11, T.11 N., R.3 W., Municipality of Anchorage, and 12 mi southeast of Anchorage.	2.54	--	10-24-79 3-25-80	1.5 0.71
/Potter Creek at Potter	Cook Inlet	Lat 61°03'08", long 149°47'33", in SE¼SW¼ sec.10, T.11 N., R.3 W., Municipality of Anchorage, near Seward Highway, and 12 mi southeast of Anchorage.	3.39	--	10-24-79 3-25-80	2.2 0.78
/Little Rabbit Creek	Rabbit Creek	Lat 61°04'21", long 149°43'26", in NW¼SE¼ sec.1, T.11 N., R.3 W., Municipality of Anchorage, at Nickleen Drive and 12 mi southeast of Anchorage.	2.57	1968-69, 1971-72	10-25-79 3-26-80	2.3 1.0
/Little Rabbit Creek Tributary	Little Rabbit Creek	Lat 61°04'49", long 149°43'39", in SE¼SW¼ sec.36, T.12 N., R.3 W., Municipality of Anchorage, and 11 mi southeast of Anchorage.	0.97	--	10-25-79	0.77
15273095 Little Rabbit Creek above Goldenview Drive	Rabbit Creek	Lat 61°04'58", long 149°45'41", in SE¼SW¼ sec.35, T.12 N., R.3 W., Municipality of Anchorage, at road crossing, 0.4 mi above Goldenview Drive, 0.6 mi below tributary mouth, and 11 mi southeast of Anchorage.	5.06	--	9-12-80 9-16-80	5.7 11
/Little Rabbit Creek	Rabbit Creek	Lat 61°04'54", long 149°46'20", in SW¼SW¼ sec.35, T.12 N., R.3 W., Municipality of Anchorage, at Goldenview Drive, and 11 mi southeast of Anchorage.	5.24	1968-69, 1971-72	10-25-79 3-26-80	3.4 2.1
+15273900 South Fork Campbell Creek	Campbell Creek	Lat 61°08'52", long 149°43'12", in NE¼ sec.12, T.12 N., R.3 W., Municipality of Anchorage, 1.9 mi upstream from Campbell Airstrip Road Crossing and 7.5 mi southeast of Anchorage.	25.2	1967-79‡	3-19-80 4-04-80 5-02-80 6-09-80 6-18-80 9-25-80	15 13 20 109 180 32

‡ Operated as a continuous-record station.
/ See analysis of samples collected at miscellaneous sites.
Also crest-stage partial-record station.
+ See analysis of samples collected at water-quality partial-record stations.
b Estimated.

Discharge measurements made at miscellaneous sites during water year 1980

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		South-Central Alaska--Continued				
/Campbell Creek below Old Seward Highway	Cook Inlet	Lat 61°10'22", long 149°51'58", in NE¼SE¼ sec.31, T.13 N., R.3 W., Municipality of Anchorage, 200 ft below Old Seward Highway bridge and 3.4 mi south of Anchorage.	--	--	9-09-80	100
/Campbell Creek above Little Campbell Creek	Cook Inlet	Lat 61°09'22", long 149°52'28", in NW¼SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, 500 ft above the confluence with Little Campbell Creek and 4.4 mi south of Anchorage.	--	--	9-09-80	98
/Little Campbell Creek at Hillside Drive	Campbell Creek	Lat 61°06'59", long 149°44'33", in SE¼NE¼ sec.23, T.12 N., R.3 W., Municipality of Anchorage, at Hillside Drive and 8.6 mi southeast of Anchorage.	--	--	9-08-80	1.5
/15274500 Little Campbell Creek at Birch Road	Campbell Creek	Lat 61°07'14", long 149°46'15", in NW¼NW¼ sec.23, T.12 N., R.3 W., Municipality of Anchorage, at Birch Road and 7.4 mi southeast of Anchorage.	--	--	9-08-80	1.6
/Little Campbell Creek at Libscomb Street	Campbell Creek	Lat 61°07'43", long 149°47'42", in NW¼SW¼ sec.15, T.12 N., R.3 W., Municipality of Anchorage, at Libscomb Street and 7.1 mi southeast of Anchorage.	--	--	9-08-80	1.1
/Little Campbell Creek at Abbott Road	Campbell Creek	Lat 61°08'17, long 149°49'07", on line between secs.9 and 16, T.12 N., R.3 W., Municipality of Anchorage, at Abbott Road and 6.2 mi southeast of Anchorage.	--	--	9-08-80	2.6
/Little Campbell Creek at Lake Otis Parkway	Campbell Creek	Lat 61°08'44, long 149°49'54", in SW¼NW¼ sec.9, T.12 N., R.3 W., Municipality of Anchorage, at Lake Otis Parkway and 5.4 mi southeast of Anchorage.	--	--	9-08-80	2.2
/Little Campbell Creek below 76th Avenue	Campbell Creek	Lat 61°09'11", long 149°51'49", in SE¼SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, below 76th Avenue and 4.7 mi south of Anchorage.	--	--	9-08-80	2.7
/Little Campbell Creek Tributary	Little Campbell Creek	Lat 61°09'14", long 149°51'46", in SE¼SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, below Old Seward Highway and 4.6 mi south of Anchorage.	--	--	9-08-80	3.0
+15274550 Little Campbell Creek at Nathan Drive	Campbell Creek	Lat 61°09'13, long 149°52'18", in SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, 0.25 mi upstream from confluence with Campbell Creek and 4.5 mi south of Anchorage.	--	1968-69, 1971	(Listed below)	

3-18-80	1.6	4-05-80	17	4-08-80	25	4-10-80	20	6-26-80	9.7
4-02-80	20	4-05-80	36	4-08-80	36	4-16-80	13	8-08-80	12
4-03-80	10	4-06-80	14	4-09-80	22	5-02-80	10	8-28-80	7.0
4-03-80	24	4-06-80	42	4-09-80	27	6-10-80	7.3	9-08-80	4.7
4-04-80	15	4-07-80	22	4-10-80	20	6-16-80	7.0	9-24-80	10
4-04-80	30	4-07-80	37						

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
/Campbell Creek below Little Campbell Creek	Cook Inlet	Lat 61°09'21", long 149°52'31", in SE¼SW¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, 1000 ft below the confluence with Little Campbell Creek and 4.5 mi south of Anchorage.	--	--	9-09-80	108
/South Branch of South Fork Chester Creek at tank trail	South Fork Chester Creek	Lat 61°11'25", long 149°42'13", in SE¼NW¼ sec.30, T.13 N., R.2 W., Municipality of Anchorage, 100 ft below bridge on tank trail and 6.4 mi east of Anchorage.	--	--	9-12-80	6.8
South Branch of South Fork Chester Creek	South Fork	Lat 61°12'21", long 149°42'55", in SW¼NW¼ sec.19, T.13 N., R.2 W., Municipality of Anchorage, near the extension of east 20th Avenue and 5.8 mi east of Anchorage.	--	--	9-19-80 9-22-80	13 14

/ See analysis of samples collected at miscellaneous sites.
+ See analysis of samples collected at water-quality partial-record stations.

Discharge measurements made at miscellaneous sites during water year 1980

South-Central Alaska--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
/South Branch of South Fork Chester Creek at Northern Lights Blvd	South Fork Chester Creek	Lat 61°11'43", long 149°45'57", in NE¼NW¼ sec.26, T.13 N., R.3 W., Municipality of Anchorage, downstream from Northern Lights Boulevard crossing and 4.5 mi southeast of Anchorage.	--	1977	9-12-80	14
/15274970 South Fork Chester Creek	Chester Creek	Lat 61°11'45", long 149°49'37", in NE¼NW¼ sec.28, Municipality of Anchorage at Northern Lights Boulevard and Providence Drive and 2.5 mi southeast of Anchorage.	--	1977	9-12-80	19
Russian Jack Springs	Chester Creek	Lat 61°12'25", long 149°46'55", in NW¼ sec.22, T.13 N., R.3 W., and 3.5 mi east of Anchorage	--	1948-49, 1952-63, 1965, 1967-74, 1976-77	9-12-80	3.4
/Middle Fork Chester Creek at Nichols Street	Chester Creek	Lat 61°12'07", long 149°48'36", in NE¼SE¼ sec.21, T.13 N., R.3 W., Municipality of Anchorage, 20 ft above culvert at Nichols Street and 2.8 mi east of Anchorage.	--	--	9-12-80	3.1
/15275000 Chester Creek	Cook Inlet	Lat 61°11'59", long 149°50'07", in SW¼ sec.21, T.13 N., R.3 W., Municipality of Anchorage, on right bank 10 ft upstream from culverts on Lake Otis Road, 3.2 mi upstream from mouth and 2.3 mi southeast of Anchorage.	20.0	1958-76‡, 1977	9-12-80	21
/North Fork Chester Creek	Chester Creek	Lat 61°12'20", long 149°50'36", in SE¼NW¼ sec.20 T.13 N., R.3 W., Municipality of Anchorage, 600 ft south of 15th Avenue and 1.7 mi east of Anchorage.	--	--	9-12-80	1.2
/15275050 Chester Creek above Ingra Street	Cook Inlet	Lat 61°12'07", long 149°51'50", on line between secs.19 and 20, T.13 N., R.3 W., Municipality of Anchorage, 100 ft above Ingra Street at Anchorage and 2.2 mi upstream from mouth.	--	1947-49, 1952, 1954-55, 1960-61, 1977	9-12-80	24
Unnamed Creek	Eagle River	Lat 61°13'10", long 149°17'04", in SE¼NW¼ sec.16, T.13 N., R.1 E., 200 yds downstream from toe of land slide and 11.3 mi southeast of Eagle River.	--	--	9-26-80	11
Eagle River	Cook Inlet	Lat 61°15'14", long 149°20'19", in SW¼SE¼ sec.31, T.14 N., R.1 E., at head of high water overflow on right bank, river mi 22.5, and 9.1 mi southeast of Eagle River.	--	--	11-06-79 4-23-80 4-30-80	124 c63 c74
Eagle River	Cook Inlet	Lat 61°16'47", long 149°23'38", in SW¼NE¼ sec.26, T.14 N., R.1 W., 150 ft upstream of Eagle River tributary, river mi 19.4 and 6.5 mi southeast of Eagle River.	--	--	11-06-79 4-23-80 4-30-80	142 c73 c87
/Eagle River Tributary at bridge	Eagle River	Lat 61°13'31", long 149°16'15", in SE¼SE¼ sec.9, T.13 N., R.1 E., at footbridge, 1.3 mi south of Paradise Lodge, 11.0 mi southeast of Eagle River and at mi 7.9.	--	--	4-23-80 4-30-80 9-26-80	d10 d11 15
Unnamed Creek	Eagle River	Lat 61°15'45", long 149°20'10", in SW¼NE¼ sec.31, T.14 N., R.1 E., at approximately mi 9.5 on Eagle River Valley Road, 8.8 mi southeast of Eagle River and at river mi 3.6.	--	--	11-06-79 4-23-80 4-30-80	43 d40 d38
Eagle River Overflow	Unnamed Creek	Lat 61°15'49", long 149°20'11", in NE¼SW¼ sec.31, T.14 N., R.1 E., 100 ft upstream from mouth and 8.8 mi southeast of Eagle River.	--	--	11-06-79 4-23-80 4-30-80	0.8 d0.9 d0.9
Unnamed Creek	Eagle River	Lat 61°16'33", long 149°22'44", in SE¼NW¼ sec.25, T.14 N., R.1 W., at M & W footbridge and 7.1 mi southeast of Eagle River.	--	--	9-08-80 9-25-80	86 116
Unnamed Creek	Eagle River	Lat 61°16'52", long 149"23'38", in NW¼NE¼ sec.26, T.14 N., R.1 W., 300 ft upstream of mouth at Eagle River mi 19.3, 6.5 mi southeast of Eagle River and at mi 0.1.	--	--	11-06-79 4-23-80 4-30-80	55 d47 d45

‡ Operated as a continuous-record station.
/ See analysis of samples collected at miscellaneous sites.
c See Eagle River seepage investigation.
d See seepage investigation of unnamed Eagle River tributary.

Discharge measurements made at miscellaneous sites during water year 1980

South-Central Alaska--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
#15285000 Wasilla Creek	Knik Arm	Lat 61°38'47", long 149°11'45", in SW¼ sec.13, T.18 N., R.1 E., Matanuska-Susitna Borough, 60 ft upstream from culvert entrance on Wasilla Fishhook Road and 4.1 mi northeast of Palmer.	16.8	1954-55, 1976-79	4-24-80 6-26-80 7-28-80 9-16-80	29 28 86 315
Cottonwood Creek	Knik Arm	Lat 61°36'52", long 149°17'18", on line between secs.28 and 33, T.18 S., R.1 E., at culvert on Bogard Road, 0.8 mi upstream from Cottonwood Lake and 5.5 mi northeast of Wasilla.	--	--	7-09-80 9-16-80 9-17-80	21 †45 37
/Peters Creek	Willow Creek	Lat 61°49'06", long 149°38'50, in SE¼SW¼ sec.16, T.20 N., R.3 W., 150 ft downstream from Purches Creek and 13 mi northeast of Willow.	--	1979	10-24-79 4-02-80	138 21
/Unnamed Creek	Deception Creek	Lat 61°44'54", long 149°55'06", in NE¼SW¼ sec.12, T.19 N., R.4 W., at mouth and 4 mi east of Willow.	--	1979	10-24-79 4-02-80	6.4 7.1
#15293000 Caswell Creek near Caswell	Susitna River	Lat 61°56'55", long 150°03'14", in SW¼ sec.32, T.22 N., R.4 W., at culvert on Anchorage-Fairbanks Highway and 2.3 mi south of Caswell.	19.6	1963-76, 1979	4-22-80 7-14-80	31 62
#15294025 Moose Creek	Kroto Creek	Lat 62°19'00", long 150°26'30", in NE¼ sec.30, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge on Petersville Road and 10.5 mi west of Talkeetna.	52.3	1972-75, 1978-79	10-16-79 5-05-80	103 496
/Tyonek Creek	Cook Inlet	Lat 61°03'45", long 151°13'03", in NW¼NW¼ sec.10, T.11 N., R.11 W., 1.8 mi from mouth and 2.8 mi southwest of Tyonek.	--	--	7-25-80	14
/Old Tyonek Creek	Cook Inlet	Lat 61°02'45", long 151°20'25", in SE¼NE¼ sec.14, T.11 N., R.12 W., 500 ft above unnamed tributary and 7 mi southwest of Tyonek.	--	--	7-25-80	7.2
/Unnamed Tributary	Old Tyonek Creek	Lat 61°02'41", long 151°20'26", in SE¼NE¼ sec.14, T.11 N., R.12 W., 100 ft from mouth and 7 mi southwest of Tyonek	--	--	7-25-80	5.6
/Unnamed Tributary	Nikolai Creek	Lat 61°04'46", long 151°34'14", in NW¼NW¼ sec.3, T.11 N., R.13 W., at road crossing and 14.5 mi northwest of Tyonek.	--	--	7-25-80	0.35
Unnamed Creek	Larsen Bay	Lat 57°32'10", long 153°59'00", in SE¼NE¼ sec.31, T.30 S., R.29 W., on Kodiak Island, 0.3 mi downstream from diversion and 0.15 mi upstream from culvert at mouth at Larsen Bay.	e6.2	1978-79	3-27-80	6.1
15296554 Thumb River near Larsen Bay	Karluk Lake	Lat 57°21'26", long 153°59'41", in NW¼SE¼ sec.31, T.32 S., R.29 W., on Kodiak Island, 600 ft upstream from inlet to Karluk Lake and 12.5 mi south of Larsen Bay. (See page 191 of this report.)	25.3	1979	10-18-79 12-06-79 3-27-80 5-14-80 6-18-80 7-15-80 8-20-80	249 76 29 173 182 144 44
Hidden Basin Creek	Hidden Basin	Lat 56°35'42", long 153°00'45", in NW¼ sec.8, T.30 S., R.23 W., on Kodiak Island, 6.5 mi upstream from mouth and 20 mi south of Port Lions.	e3.0	1978-79	10-17-79 6-17-80	44 65
Shotgun Creek	Falls Creek	Lat 57°39'20", long 152°56'15", in NW¼NW¼ sec.23, T.29 S., R.23 W., on Kodiak Island, 1.0 mi upstream from mouth and 14 mi south of Port Lions.	e1.9	1978-79	7-16-80 8-21-80	30 10
Falls Creek	Kizhuyak River	Lat 57°40'08", long 152°56'00", in NW¼NW¼ sec.14, T.29 S., R.23 W., on Kodiak Island, 0.5 mi upstream from Shotgun Creek, 1.6 mi upstream from mouth, and 14 mi south of Port Lions.	e4.3	1978-79	10-17-79 6-17-80 7-16-80 8-21-80	68 88 78 22

/ See analysis of samples collected at miscellaneous sites.
# Also crest-stage partial-record station.
† Measurement of peak flow.
e Approximately.

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		South-Central Alaska--Continued				
Rolling Creek Creek	Kizhuyak River	Lat 56°41'40", long 152°54'00", in NW¼ sec.1 T.29 S., R.23 W., on Kodiak Island, 0.75 mi upstream from mouth and 12 mi south of Port Lions.	e2.1	1979	10-17-79 5-15-80 6-17-80 7-16-80 8-21-80	11 10 34 20 2.8
Port Lions Creek	Settler Cove	Lat 57°51'52", long 152°53'25", in NW¼SW¼ sec.5, T.27 S., R.22 W., on Kodiak Island, 200 ft downstream from unnamed tributary, 0.5 mi upstream from mouth, and 0.5 mi southeast of Port Lions.	e11	1979	3-28-80	37
		Southwest Alaska				
Tazimina River	Lake Clark	Lat 59°06'07", long 154°36'50", in SW¼NE¼ sec. 9, T.3 S., R.31 W., 12 mi upstream of mouth and 15 mi northeast of Iliamna.	e300	--	1-11-80 2-27-80	290 302
/Izavieknik River (head of Togiak River)	Upper Togiak Lake	Lat 59°52'08", long 159°26'12", in SW¼SW¼ sec.33, T.3 S., R.59 W., at inlet to upper Togiak Lake, 65 mi northeast of Togiak.	29	--	8-22-80	192
/Izavieknik River	Togiak Lake	Lat 59°48'22", long 159°29'30", in NE¼NW¼ sec.30, T.4 S., R.59 W., at outlet of upper Togiak Lake, 60 mi northeast of Togiak.	62	--	8-23-80	505
/Trail Creek	Izavieknik River	Lat 59°47'27", long 159°30'30", in SW¼NE¼ sec.36, T.4 S., R.60 W., above mouth, 59 mi northeast of Togiak.	227	--	8-26-80	828
/Izavieknik River	Togiak Lake	Lat 59°43'10", long 159°32'42", in NW¼NE¼ sec.30, T.5 S., R.60 W., at inlet to Togiak Lake, 55 mi northeast of Togiak.	384	--	8-28-80	1,760
/West Creek	Togiak Lake	Lat 59°37'21", long 159°38'30", in SE¼SW¼ sec.27, T.6 S., R.61 W., 0.7 mi upstream from mouth, 47 mi northeast of Togiak.	17	--	8-29-80	76
/Bruin Creek	Togiak Lake	Lat 59°35'24", long 159°36'49", in NE¼NW¼ sec.11, T.7 S., R.61 W., at mouth 45 mi northeast of Togiak.	12	--	8-30-80	34
/Togiak River	Togiak Bay	Lat 59°31'57", long 159°41'39", in NE¼NW¼ sec.32, T.7 S., R.61 W., at outlet of Togiak Lake, 40 mi northeast of Togiak.	515	--	8-31-80	2,310
/Togiak River	Togiak Bay	Lat 59°23'48", long 159°50'42", in SE¼NW¼ sec.14, T.9 S., R.62 W., 2 mi downstream from Ongivinuk River, 29 mi northeast of Togiak.	829	--	9-02-80	3,240
/Narogurum River	Togiak Bay	Lat 59°22'36", long 160°00'24", in SW¼SE¼ sec.23, T.9 S., R.63 W., at mouth 25 mi northeast of Togiak.	259	--	9-04-80	589
/Togiak River	Togiak Bay	Lat 59°16'44", long 160°11'48", in NE¼ SE¼, sec.27, T.10 S., R.64 W., 2 mi upstream from Pungokepuk Creek, 16 mi northeast of Togiak.	1,408	--	9-06-80	3,280
/Pungokepuk Creek	Togiak River	Lat 59°15'33", long 160°11'24", in NW¼NW¼ sec.2, T.11 S., R.64 W., at mouth 15 mi northeast of Togiak.	99	--	9-07-80	327
		Yukon Alaska				
/Chena Slough	Chena River	Lat 64°45'26", long 147°19'38", in SE¼SE¼ NW¼ sec.10, T.2 S., R.2 E., at culvert at Mission Road, 0.7 mi northeast of North Pole.	--	1976	4-24-80	3.0
/Chena Slough	Chena River	Lat 64°47'21", long 147°23'03", in NE¼ sec.32, T.1 S., R.2 E., 5 mi upstream from Chena River, 2.9 mi northeast of North Pole.	--	1973	4-24-80	25
/15512000 Chena Slough	Chena River	Lat 64°49'15", long 147°26'15", in NW¼NW¼ NW¼ sec.19, T.1 S., R.2 E., 100 ft upstream from culvert at Peede Road, 2.7 mi upstream from mouth.	--	1948-52‡, 1976	4-25-80	44

‡ Operated as a continuous-record station.
/ See analysis of samples collected at miscellaneous sites.
e Approximately.

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Yukon Alaska--Continued				
Salchaket Slough	Tanana River	Lat 64°44'17", long 147°42'30", in E½SE¼ sec.15, T.2 S., R.1 W., 5.8 mi upstream from Clear Creek, 7.7 mi upstream from north channel of Salchaket Slough, 7.0 mi southeast of Fairbanks International Airport Terminal, and 9.3 mi upstream from mouth.	--	--	2-25-80 3-06-80	357 353
+Healy Creek	Nenana River	Lat 63°53'08", long 148°38'20", in NE¼SW¼ sec.12, T.12 S., R.6 W., 1.3 mi upstream from Coal Creek, 4.6 mi northeast of Usibelli.	61.7	1976-78	5-22-80 7-09-80 8-29-80 9-22-80	64 65 93 127
+Healy Creek	Nenana River	Lat 63°51'58", long 148°45'27", in NE¼NE¼ sec.20, T.12 S., R.6 W., 0.1 mi upstream from French Gulch, 0.7 mi northeast of Usibelli, and 5.6 mi upstream from mouth.	94	--	5-23-80 7-09-80 8-29-80	108 95 177
+Healy Creek	Nenana River	Lat 63°51'04", long 148°52'59", in NW¼NW¼ sec.26, T.12 S., R.7 W., just upstream from Moody Creek, 1 mi west of Suntrana, and 1.6 mi upstream from mouth.	109	--	5-16-78 5-23-80 7-08-80 8-28-80 9-23-80	219 118 117 179 226
+Sanderson Creek	Lignite Creek	Lat 63°55'13", long 148°40'50", in S½NW¼ sec.35, T.11 S., R.6 W., 0.8 mi upstream from mouth, 5.1 mi northeast of Usibelli, and 9.6 mi east-northeast of Healy.	5.06	--	5-23-80 7-09-80 8-28-80 9-22-80	4.4 3.3 12 13
+Francis Creek	Lignite Creek	Lat 63°54'42", long 148°53'40", in SW¼SE¼ sec.34, T.11 S., R.7 W., 100 ft upstream from mouth, 4.2 mi northeast of Healy, and 4.2 mi northwest of Suntrana.	1.79	--	7-08-80 8-28-80 9-22-80	0.06 0.29 0.09
+Lignite Creek	Nenana River	Lat 63°54'17", long 148°59'01", in SE¼NE¼ sec.6, T.12 S., R.7 W., Fairbanks Meridian, 0.5 mi upstream from mouth and 3.3 mi north of Healy.	48.1	--	5-22-80 7-08-80 8-28-80 9-22-80	45 20 34 61
		Northwest Alaska				
/Kogoluktuk River	Kobuk River	Lat 66°56'42", long 156°45'06", in sec.19, T.18 N., R.10 E., 1.5 mi upstream from mouth and 5 mi northeast of Kobuk.	626	1979	4-02-80	63
/Kobuk River	Kotzebue Sound	Lat 66°54'12", long 156°53'06", in sec.3, T.17 N., R.9 E., 0.3 mi upstream from Kobuk.	4,170	1979	4-02-80	1,240
Cosmos Creek	Kobuk River	Lat 66°54'06", long 157°11'60", in sec.6, T.17 N., R.8 E., 2 mi northwest of Shungnak and 4 mi upstream from mouth.	38.9	--	3-31-80	No flow
/Hunt River	Kobuk River	Lat 67°11'54", long 158°32'42", in sec.23, T.21 N., R.1 E., 1 mi upstream from mouth and 22 mi northwest of Ambler.	646	--	3-28-80	164
/Portage Creek	Kobuk River	Lat 66°53'30", long 160°18'15", in sec.12, T.17 N., R.8 W., 3.5 mi upstream from mouth and 6 mi southeast of Kiana.	18.4	--	3-24-80	b0.5
/Canyon Creek	Squirrel River	Lat 67°05'09", long 160°17'36", in sec.31, T.20 N., R.7 W., 9 mi upstream from mouth and 8 mi northeast of Kiana.	10.3	--	3-23-80	1.8
/Squirrel River	Kobuk River	Lat 67°02'00", long 160°24'00", in sec.15, T.19 N., R.8 W., 6 mi upstream from mouth and 4 mi north of Kiana.	1,609	--	3-24-80	26
/Kobuk River	Kotzebue Sound	Lat 66°56'04", long 160°30'12", in sec.30, T.18 N., R.8 W., 4 mi downstream from Kiana.	11,054	--	4-05-80	1,860
		Arctic Slope Alaska				
/Itkillik River	Beaufort Sea	Lat 70°08'22", long 150°55'32", in NE¼NW¼ sec.17, T.9 N., R.5 E., 0.8 mi above mouth and 5 mi southeast of Nuiqsut.	--	--	9-10-80	1,410

/ See analysis of samples collected at miscellaneous sites.
+ See analysis of samples collected at water-quality partial-record sites.
b Estimated.

Discharge measurements made at miscellaneous sites during water year 1980

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Arctic Slope Alaska				
+15880000 Colville River	**Beaufort Sea**	Lat 70°09'56", long 150°55'00", North Slope Borough, 1 mi downstream from Itkillik River, 4 mi southeast of Nuiqsut, and 25 mi upstream from mouth.	20,670	1975, 1977‡, 1979	8-14-75	12,700
					6-06-80	190,000
					9-10-80	16,500

‡ Operated as a continuous-record station.
/ See analysis of samples collected at miscellaneous sites.
* See analysis of samples collected at water-quality partial-record sites.

Eagle River seepage investigation--Eagle River

A series of discharge measurements were made during the 1980 water year, on April 23 and 30, on Eagle River and tributaries to study channel gains and losses. The reach is 17.0 miles in length and extends from about 11 miles downstream from the terminus of Eagle Glacier to the USGS stream-gaging station 9.0 miles upstream from the mouth. These measurements were made during a period of steady low flow. Indicated gains or losses may be substantially in error as effected by small inaccuracies in open-channel measurements. Previous seepage investigations of this reach were made on May 8 and October 25, 1974.

The river mile assigned to a particular location differs between the 1974 and the 1980 measurements because more detailed maps have become available since 1974 and a more precise method was used to measure river miles. The tables herein present the revised and previously published river miles. Several small inflows were estimated and grouped together in the table and only a general location is shown.

River Miles				Discharge (ft^3/s)			
Revised	Previous	Stream	Location	Inflow	Main stem	Gain or loss	Specific Conductance (micromhos)
			April 23, 1980				
26.0	24.2	Eagle River	SW¼SW¼NE¼ sec.16, T.13 N., R.1 E.	--	58.6	--	230
22.5	--	.....do....	SE¼SW¼SE¼ sec.31, T.14 N., R.1 E.	--	62.5	+3.9	220
--	--	Inflow	SE¼SE¼SW¼ sec.31, T.14 N., R.1 E.	0.7	--	--	140
--	--	Inflows	Five sites, sec.31, T.14 N., R.1 E.; sec.36, T.14 N., R.1 W.	e1.9	--	--	--
21.1	--	Eagle River	NW¼SW¼NE¼ sec.36, T.14 N., R.1 W.	--	64.1	-1.0	220
--	--	Inflows	Four sites, SW¼NE¼NE¼ sec.36, T.14 N., R.1 W.	e0.8	--	--	--
20.7	19.0	Eagle River	NE¼NW¼NW¼ sec.36, T.14 N., R.1 W.	--	65.7	+0.8	240
19.4	--	.....do....	SW¼NE¼NE¼ sec.26, T.14 N., R.1 W., above tributary	--	73.1	+7.4	230
19.3	17.8	Tributary	NW¼NE¼NE¼ sec.26, T.14 N., R.1 W., at mouth	46.6	--	--	--
--	--	Inflows	Nine sites, secs.15,16,&23, T.14 N., R.1 W.	e1.5	--	--	--
14.1	--	Eagle River	SE¼SW¼SW¼ sec.16, T.14 N., R.1 W., above South Fork	--	134.6	+13.4	230
14.0	13.2	South Fork	SW¼SW¼SW¼ sec.16, T.14 N., R.1 W., 100 ft above mouth	12.6	--	--	170
			April 30, 1980				
26.0	24.2	Eagle River	SW¼SW¼NE¼ sec.16, T.13 N., R.1 E.	--	71.6	--	240
24.3	--	.....do....	SW¼NE¼NE¼ sec.8, T.13 N., R.1 E.	--	68.6	-3.0	155
--	--	Inflows	Four sites, secs.5,6,&8, T.13 N., R.1 E.	e1.3	--	--	--
22.5	--	Eagle River	SE¼SW¼SE¼ sec.31, T.14 N., R.1 E.	--	74.3	+4.4	230
--	--	Inflows	Ten sites, sec.31, T.14 N., R.1 E.; sec.36, T.14 N., R.1 W.	e4.1	--	--	--
20.7	19.0	Eagle River	NE¼NW¼NW¼ sec.36, T.14 N., R.1 W.	--	83.2	+4.8	225
19.4	--	.....do....	SW¼NE¼NE¼ sec.26, T.14 N., R.1 W., above tributary	--	86.9	+3.7	--
19.3	17.8	Tributary	NW¼NE¼NE¼ sec.26, T.14 N., R.1 W., at mouth	44.6	--	--	--
--	--	Inflows	Six sites, sec.23&26, T.14 N., R.1 W.	e1.2	--	--	--
16.8	--	Eagle River	SE¼SW¼SE¼ sec.22, T.14 N., R.1 W., above tributary	--	130.0	-2.7	--
--	--	Inflow	SE¼SW¼SE¼ sec.22, T.14 N., R.1 W.	1.4	--	--	155
--	--	Inflows	Nine sites, secs.15,16,21,&27, T.14 N., R.1 W.	e1.6	--	--	--
14.1	--	Eagle River	SE¼SW¼SW¼ sec.16, T.14 N., R.1 W., above South Fork	--	141.7	+8.7	230
14.0	13.2	South Fork	SW¼SW¼SW¼ sec.16, T.14 N., R.1 W., 100 ft above mouth	17.6	--	--	160
9.0	8.5	Eagle River	SW¼NW¼NW¼ sec.13, T.14 N., R.2 W., gaging station number 15277100	--	162.1	+2.8	--
			Overall net gain			+18.7	

e Estimated

Unnamed tributary to Eagle River seepage investigation--Eagle River

Two series of discharge measurements were made during the 1980 water year, on April 23 and 30, on an unnamed tributary to Eagle River to study gains and losses. The seepage investigations on the tributary were made concurrently with seepage investigations on Eagle River, which are published on the previous page. The reach of the tributary is 7.9 miles long and extends from about one-half mile downstream from where tributary enters the valley floor from the mountains to where it enters Eagle River. The mouth of the tributary is at River Mile 19.3 on Eagle River. These measurements were made during a period of steady flow. Indicated gains or losses may be substantially in error as effected by small inaccuracies in open-channel measurements. Several small inflows were estimated and grouped together in the table and only a general location is shown.

River Miles	Stream	Location	Discharge (ft^3/s) Inflow	Main stem	Gain or loss	Specific Conductance (micromhos)
		April 23, 1980				
7.9	Main stem	SE¼SE¼SE¼ sec.9, T.13 N., R.1 E., at state park footbridge	--	10.2	--	210
--	Inflows	Twelve sites, secs.4&5, T.13 N., R.1 E., along Eagle River Road	e4.8	--	--	--
3.6	Main stem	NE¼SW¼NE¼ sec.31, T.14 N., R.1 E., 500 ft above tributary	--	40.3	+25.3	210
3.5	Tributary	NE¼SW¼NE¼ sec.31, T.14 N., R.1 E., 100 ft above mouth	0.9	--	--	--
--	Inflows	Two sites, NW¼NE¼ sec.31, T.14 N., R.1 E., along right bank	e0.8	--	--	--
2.2	Tributary	NW¼NE¼SE¼ sec.25, T.14 N., R.1 W., at Eagle River Road	1.2	--	--	240
1.6	Main stem	NW¼NW¼SE¼ sec.25, T.14 N., R.1 W.	--	44.7	+1.5	225
--	Inflows	Two sites, NW¼ sec.25, T.14 N., R.1 W., along Eagle River Road	e0.3	--	--	--
0.1	Main stem	NW¼NE¼NE¼ sec.26, T.14 N., R.1 W., 300 ft above mouth	--	46.6	+1.6	225
		Overall net gain			+28.4	
		April 30, 1980				
7.9	Main stem	SE¼SE¼SE¼ sec.9, T.13 N., R.1 E., at state park footbridge	--	11.0	--	200
6.4	.....do....	NW¼SE¼SW¼ sec.4, T.13 N., R.1 E., 200 ft below beaver dam	--	18.0	+7.0	210
--	Inflows	Seven sites, S½ sec.4, T.13 N., R.1 E., along Eagle River Road	e3.8	--	--	--
5.4	Main stem	SW¼NE¼NE¼ sec.5, T.13 N., R.1 E.	--	28.7	+6.9	--
--	Inflows	Two sites, NE¼NW¼ and NW¼NE¼ of NE¼, sec.5, T.13 N., R.1 E., along right bank	e0.5	--	--	--
4.9	Main stem	SE¼NE¼NW¼ sec.5, T.13 N., R.1 E., 100 ft above tributary	--	30.9	+1.7	--
--	Tributary	SW¼NE¼NW¼ sec.5, T.13 N., R.1 E., 1000 ft above mouth	2.6*	--	--	--
--	Inflows	Three sites, W½ sec.32, T.14 N., R.1 E., along Eagle River Road	e0.9	--	--	--
3.6	Main stem	NE¼SW¼NE¼ sec.31, T.14 N., R.1 E., 500 ft above fork	--	38.1	+3.7	--
3.5	Tributary	NE¼SW¼NE¼ sec.31, T.14 N., R.1 E., 100 ft above mouth	0.9*	--	--	--
--	Inflows	Two sites, NW¼NE¼ sec.31, T.14 N., R.1 E., along right bank	e0.8	--	--	--
2.2	Tributary	NW¼NE¼SE¼ sec.25, T.14 N., R.1 W., at Eagle River Road	1.7	--	--	--
1.6	Main stem	NW¼NW¼SE¼ sec.25, T.14 N., R.1 W.	--	42.8	+1.3	--
--	Inflows	Two sites, NW¼ sec.25, T.14 N., R.1 W., along Eagle River Road	e0.2	--	--	--
0.1	Main stem	NW¼NE¼NE¼ sec.26, T.14 N., R.1 W., 300 ft above mouth	--	44.6	+1.6	--
		Overall net gain			+22.2	

* Shallow underflow or ground water.
e Estimated.

SOUTH-CENTRAL ALASKA

Measurements of lake levels of selected lakes are given in the following table. Data are being collected at these lakes to define lake level changes from seasonal variations, the effects of man, response to droughts and response to changes in the ground-water system. Lake levels are referenced to an arbitrary gage datum and may not be at National Geodetic Vertical Datum.

Lake	Tributary to	Location	Surface area (acres)	Measured previously (water year)	Measurements	
					Date	Lake Level (ft)
		Kenai Peninsula Borough				
Shadura	Closed lake in Beaver Creek basin	Lat 60°42'17", long 151°00'12", in NE¼ sec.15, T.7 N., R.10 W., at north shore, 13 mi northeast of Kenai.	258	1970-71, 1976-79	10-15-79 5-06-80	16.44 17.79
Konovalof	Closed Lake in Beaver Creek basin	Lat 60°39'49', long 151°09'52", in SW¼ sec.26, T.7 N., R.11 W., at south shore of island near north shore of lake, 8.5 mi northeast of Kenai.	256	1970-71, 1976-79	10-15-79 5-06-80	17.28 18.45
Kidney	Closed lake	Lat 60°39'48", long 151°15'35", in SW¼ sec.29, T.7 N., R.11 W., at the eastern shore, 0.2 mi north of Lamplighter Holt Road, and 7.5 mi north of Kenai.	71	+1970-72, +1974-76, 1977-79	10-09-79 5-06-80	104.54 105.48
Cabin	Closed lake	Lat 60°40'30", long 151°19'15", in NE¼ sec.26, T.7 N., R.12 W., at the eastern shore, 0.2 mi west of Miller Loop Road, and 8.5 mi north of Kenai.	53	+1970-72, +1974-76, 1977-79	10-09-79 5-06-80	94.88 96.54
Island	Closed lake	Lat 60°42'19", long 151°19'05", in SE¼ sec.11, T.7 N., R.12 W., at the western shore, 0.1 mi east of Island Lake Road, and 10.7 mi north of Kenai.	272	+1970-72, +1974-76, 1977-79	10-10-79 5-06-80	100.50 101.38
Unnamed Lake	Closed lake	Lat 60°40'56", long 151°20'54", in SW¼ sec.23, T.7 N., R.12 W., at the southern shore, 0.4 mi north of Miller Loop Road, and 9.4 mi north of Kenai.	8.6	+1970-72, +1974-76, 1977-79	10-10-79 5-06-80	95.83 97.36
Douglas	Closed lake	Lat 60°40'27", long 151°13'20", in NW¼ sec.28, T.7 N., R.11 W., at the northern shore, 0.8 mi east of Lamplighter Holt Road, and 8.3 mi north of Kenai.	90	+1970-72, +1974-76, 1977-79	10-09-79 5-06-80	108.64 109.92
Wick	Closed lake	Lat 60°43'06", long 151°14'35", in NE¼ sec.8, T.7 N., R.11 W., at the northern shore, 0.2 mi south of Lamplighter Holt Road, and 11.4 mi north of Kenai.	173	+1970-72, +1974-76, 1977-79	10-10-79 5-06-80	107.26 108.54
Laura	Closed lake	Lat 60°43'44", long 151°13'15", in NW¼ sec.4, T.7 N., R.11 W., at the northwestern shore, 0.3 mi southeast of Halbouty Road, and 12.1 mi north of Kenai.	41	+1970-72, +1974-76, 1977-79	10-10-79 5-06-80	107.66 109.02
Daniels	Bishop Creek	Lat 60°44'25", long 151°10'27", in SW¼ sec.34, T.8 N., R.11 W., at northwest shore, 1.2 mi east of North Kenai Road, and 13 mi north of Kenai.	602	+1970-72, +1976, 1977-79	10-10-79 5-06-80	86.04 86.08
		Municipality of Anchorage				
Sand	Closed lake	Lat 61°09'03", long 149°58'25", in NW¼ sec.10, T.12 N., R.4 W., at western shore, 4.0 mi southwest of Spenard. (Station number 15274700.)	78	#1967-74, 1975-79	10-22-79 4-21-80 5-20-80 6-18-80 7-21-80 8-21-80 9-22-80 9-29-80	85.24 86.28 86.21 86.22 86.21 86.37 86.35 86.38
Little Campbell (formerly Campbell Point)	Closed lake	Lat 61°09'49", long 150°01'20", in NE¼ sec. 5, T.12 N., R.4 W., in Kincaid Park near Anchorage International Airport, at the northeast shore, 11.9 mi southwest of Spenard.	11	1975 1977-78	9-29-80	68.6
Conners	Closed lake	Lat 61°10'03", long 149°55'44", in SE¼ sec.35, T.13 N., R.4 W., near Anchorage International Airport; at southeast shore, 2.8 mi southwest of Spenard.	33	1973-75 1977-79	9-29-80	76.2

+ Published at different datum. Converted to National Geodetic Vertical Datum.

# Operated as a daily stage station during open water with occasional readings during rest of year.

LAKE-LEVEL MEASUREMENTS OF SELECTED LAKES--Continued

SOUTH-CENTRAL ALASKA

Lake	Tributary to	Location	Surface area (acres)	Measured Previously (water year)	Measurements	
					Date	Lake Level (ft)
		Municipality of Anchorage--Continued				
Jewel	Closed lake	Lat 61°08'23", long 149°57'41", in SE¼ sec.10, T.12 N., R.4 W., at public swimming area on northeast shore, 4.2 mi southwest of Spenard.	27	1974-75, 1977-79	9-29-80	91.6
Sundi	Closed lake	Lat 61°08'50", long 149°57'55", in NE¼ sec.10, T.12 N., R.4 W., at northeast shore, 3.9 mi southwest of Spenard.	8.8	1974-75, 1977-79	9-29-80	90.6
Delong	Closed lake	Lat 61°09'47", long 149°57'20", in NE¼ sec.3, T.12 N., R.4 W., near Anchorage International Airport; at southeast shore, 2.8 mi southwest of Spenard.	18	1973, 1977-79	9-29-80	74.8
Goose	Closed lake	Lat 61°11'48", long 149°49'06", in SE¼ sec.21, T.12 N., R.3 W., at the northern shore, and 2.9 mi southeast of Anchorage Post Office.	18	+1958-64, +1969-72, +1975, 1977-79	9-29-80	19.4
Lake Otis	Closed lake	Lat 61°11'27", long 149°50'18", in NE¼ sec.29, T.13 N., R.2 W., at the southeastern shore, and 2.6 mi southeast of Anchorage Post Office.	9.0	+1958-59, 1969-73, 1975, 1977-79	9-30-80	16.9
		Matanuska-Susitna Borough				
Big	Fish Creek	Lat 61°32'04", long 149°49'30", in SE¼ sec.28, T.17 N., R.3 W., head of Fish Creek at lake outlet, on left bank upstream from square notched weir upstream from bridge on Big Lake Road, and 13 mi southwest of Wasilla. (Station number 15287000.)	3,104	1972-79	10-16-79 6-03-80 7-21-80 8-25-80	10.46 10.22 10.32 10.40
Scotty	Ninemile Creek	Lat 62°19'05", long 150°19'20", head of Ninemile Creek, 0.1 mi north of Petersville Road, 0.3 mi south of outlet, and 7 mi west of Talkeetna. (Station number 15294030.)	224	1972-79	6-03-80 7-21-80 8-25-80	9.78 9.64 9.76

+ Published at different datum.

Water-quality partial-record stations are particular sites where chemical-quality, biological and or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly.

SOUTHEAST ALASKA

*15011858 - KETA R BL RED C NR KETCHIKAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAY 03...	1020	501	--	7.0	2.0	10	13.4	8	0	2.6	.3
AUG 07...	1100	270	17	7.8	9.0	0	11.1	11	3	3.9	.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
MAY 03...	.5	.2	10	--	--	.1	2.1	--	--	.06	.010
AUG 07...	.7	.2	10	7.0	.6	.1	3.3	27	21	.00	.010

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
MAY 03...	.07	.060	.36	.42	.49	.000	.010	1	0	3	150
AUG 07...	.00	.000	1.3	1.3	1.3	.001	.000	0	1	4	130

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAY 03...	3	10	.5	0	0	60	5.3	.4	2	2.7
AUG 07...	3	10	.1	1	0	20	5.7	.1	1	.73

*15011860 - KETA R AB HILL C NR KETCHIKAN AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 27...	1330	145	18	3.0	15	6.4	10.6	10	3.7	.1
FEB 14...	1200	206	29	.0	5	.40	6.4	8	2.9	.2

* LOW-FLOW PARTIAL-RECORD STATION

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTHEAST ALASKA--Continued

*15011860 - KETA R AB HILL C NR KETCHIKAN AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
NOV 27...	.8	.3	5.5	.8	.0	3.2	23	.07	.020	.09
FEB 14...	.6	.3	.4	.7	.1	3.2	24	.28	.000	.28

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
NOV 27...	.020	.29	.31	.40	.000	.000	0	0	2	50
FEB 14...	.060	.00	.00	.28	.000	.000	1	0	5	160

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
NOV 27...	16	0	.4	1	0	30	9.5	.2	2	.78
FEB 14...	0	10	.1	0	0	0	--	.2	--	--

*15011865 - HILL C AB WHITE C NR KETCHIKAN AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
FEB 14...	1500	19	34	6.0	.0	5	1.0	12.9	9	--	3.0
MAY 03...	1400	63	16	7.0	3.5	5	--	13.1	7	2	2.0

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
FEB 14...	.3	.7	.3	--	1.2	.7	.1	3.4	22	--	.19
MAY 03...	.6	.7	.4	7	4.8	.3	.1	3.5	16	16	.15

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
FEB 14...	.000	.19	.010	.05	.06	.25	.000	.000	1	1	6
MAY 03...	.010	.16	.040	.20	.24	.40	.010	.010	1	0	2

* LOW-FLOW PARTIAL-RECORD STATION

SOUTHEAST ALASKA--Continued

*15011865 - HILL C AB WHITE C NR KETCHIKAN AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
FEB 14...	100	1	10	.3	0	0	20	--	.2	--	--
MAY 03...	120	3	10	.2	1	0	40	3.2	.5	1	.17

*15011875 - HILL C NR MOUTH NR KETCHIKAN AK

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	COLOR (PLAT- INUM COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 28...	1200	34	36	6.2	1.5	10	.40	11.6	14	8	5.2	.3
FEB 14...	1300	41	41	6.4	.0	10	.00	13.3	12	--	4.1	.4
MAY 03...	1200	148	21	6.9	3.0	5	--	12.6	8	2	2.8	.2
AUG 07...	1320	71	23	7.4	12.0	0	--	10.8	11	5	4.0	.2

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
NOV 28...	1.0	.3	8	0	12	.8	.0	4.4	30	28	.06
FEB 14...	.8	.3	--	--	6.5	1.2	.1	4.3	31	--	.10
MAY 03...	.7	.4	7	0	3.4	2.9	.1	3.1	13	17	.06
AUG 07...	.5	.3	7	0	4.7	.5	.0	1.8	19	15	.00

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE' TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
NOV 28...	.020	.08	.010	.31	.32	.40	.000	.000	0	0	0
FEB 14...	.000	.10	.010	.04	.05	.15	.000	.000	0	0	13
MAY 03...	.010	.07	.040	.22	.26	.33	.010	.010	1	0	2
AUG 07...	.010	.00	.000	.56	.56	.56	.010	.000	0	0	6

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
NOV 28...	30	2	0	.3	0	0	0	25	.1	1	.09
FEB 14...	100	3	0	.1	2	0	10	28	.2	--	--
MAY 03...	90	3	10	.3	4	0	10	4.6	.2	2	.80
AUG 07...	50	4	0	.1	5	0	20	3.5	.1	1	.19

* LOW-FLOW PARTIAL-RECORD STATION

*15011890 - BEAVER CREEK NEAR KETCHIKAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 14...	1600	8.3	45	6.7	.0	5	.50	13.0	8	--	3.2
MAY 03...	1600	26	24	6.9	4.0	5	--	--	10	5	3.3
AUG 07...	1530	11	60	6.5	12.0	5	--	10.1	10	5	3.7

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
FEB 14...	.1	.6	.9	--	7.5	.7	.1	3.0	31	--	.06
MAY 03...	.4	.6	.2	6	5.2	.6	.1	2.8	15	16	.00
AUG 07...	.1	1.2	.2	6	7.6	.3	.1	3.5	29	20	.00

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
FEB 14...	.000	.06	.010	.02	.03	.09	.000	.000	1	0	13
MAY 03...	.010	.00	.060	.17	.23	.23	.000	.010	1	0	2
AUG 07...	.000	.00	.000	.37	.37	.37	.060	.080	1	0	3

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB 14...	190	4	10	.1	0	0	30	--	.1	--	--
MAY 03...	120	3	10	.2	2	0	10	3.3	.2	1	.07
AUG 07...	200	2	10	.1	2	0	10	2.6	.1	0	.00

#15086910 - NAVY LK OUTLET NR MEYERS CHUCK AK (LAT 56 04 04 LONG 132 25 30)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 25...	1100	1.4	17	6.1	1.5	12.6	6	--	1.6
APR 12...	1530	167	20	6.3	4.0	11.4	5	0	1.5

* LOW-FLOW PARTIAL-RECORD STATION
# STREAM-GAGING STATION FOR WHICH DISCHARGE WAS NOT PUBLISHED

SOUTHEAST ALASKA--Continued

#15086910 - NAVY LK OUTLET NR MEYERS CHUCK AK (LAT 56 04 04 LONG 132 25 30)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
JAN									
25...	.4	1.1	.3	--	--	.3	1.9	.1	1.8
APR									
12...	.2	1.0	.2	5	0	1.3	1.7	.1	2.5

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JAN									
25...	--	.06	.010	.35	.36	.42	.010	2	.01
APR									
12...	11	.06	.080	.17	.25	.31	.010	1	.45

#15086912 - NAVY C NR MEYERS CHUCK AK (LAT 56 03 42 LONG 132 26 58)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN									
25...	1500	1.0	18	6.2	.0	15.0	10	--	3.2
APR									
13...	1100	100	17	6.8	4.5	12.2	4	1	1.4

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
JAN									
25...	.4	1.4	.3	--	--	1.2	2.0	.1	9.7
APR									
13...	.2	1.1	.2	4	0	1.6	1.6	.1	2.4

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JAN									
25...	--	.05	.010	.51	.52	.57	.010	--	--
APR									
13...	11	.04	.220	.13	.35	.39	.010	2	.54

#15087108 - ZAREMBO C NR WRANGELL AK (LAT 56 20 13 LONG 132 58 45)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT									
19...	1430	1.8	25	6.9	5.0	10.8	8	0	2.2
JAN									
29...	1405	.46	33	6.8	--	13.0	12	--	3.3
APR									
10...	1300	2.1	24	6.7	2.0	12.1	7	1	2.3

STREAM-GAGING STATION FOR WHICH DISCHARGE WAS NOT PUBLISHED

SOUTHEAST ALASKA--Continued

#15087108 - ZAREMBO C NR WRANGELL AK (LAT 56 20 13 LONG 132 58 45)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 19...	.5	1.7	.2	9	0	4.3	2.7	.0	3.1
JAN 29...	.8	2.5	.2	--	--	.7	4.8	.0	2.9
APR 10...	.3	1.6	.2	7	0	1.8	2.0	.0	2.3

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 19...	19	.06	.000	.18	.18	.24	.010	1	.00
JAN 29...	--	.07	.040	.88	.92	.99	.010	1	.00
APR 10...	14	.00	.000	.39	.39	.39	.010	1	.01

#15087110 - ZAREMBO C NR POINT BAKER AK (LAT 56 20 17 LONG 132 59 47)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 19...	1630	1.0	27	7.1	6.5	10.6	--	--	--
APR 10...	1530	2.4	23	7.0	4.5	12.1	6	1	1.8

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT 19...	.5	1.5	.3	10	0	4.3	2.8	.0	1.8
APR 10...	.4	1.6	.2	6	0	1.5	2.2	.0	2.3

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 19...	--	.22	.250	.26	.51	.73	.010	4	.01
APR 10...	13	.01	.020	.28	.30	.31	.010	1	.01

STREAM-GAGING STATION FOR WHICH DISCHARGE WAS NOT PUBLISHED

SOUTH-CENTRAL ALASKA

15238995 - KACHEMAK C NR HOMER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
23...	1130	143	1.5	3	1.2
JAN					
08...	1300	17	.0	16	.73
JUN					
10...	1130	659	6.0	95	169
JUL					
17...	1600	1050	6.0	310	879

†15273900 - SF CAMPBELL C AT CANYON MTH NR ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
MAR								
19...	1330	15	100	6.6	--	.0	14.5	100
APR								
04...	1400	13	100	7.1	--	2.0	13.6	101
09...	1600	15	100	6.9	--	2.5	13.6	100
MAY								
02...	1400	20	100	--	--	3.5	13.0	100
JUN								
09...	1230	109	55	6.7	--	5.5	12.8	102
10...	2000	143	50	6.6	--	6.0	12.5	101
12...	2000	139	60	7.2	--	5.5	12.5	101
16...	1100	129	55	6.9	--	5.5	12.5	100
18...	1015	180	55	6.2	--	4.0	13.2	101
19...	2000	153	50	6.8	--	7.5	11.8	101
23...	1030	143	50	6.6	--	7.0	12.2	100
25...	2030	202	45	6.6	--	6.5	12.3	102
27...	1000	168	45	6.3	--	7.0	12.8	106
JUL								
01...	1100	159	50	6.6	13.0	6.0	12.8	103
07...	1330	218	45	6.5	13.0	7.5	11.8	100
SEP								
09...	1200	80	75	7.4	12.0	5.5	13.0	104
25...	1140	82	70	7.2	10.0	4.5	12.9	99

DATE	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAR								
19...	--	0	<1	<1	43	0	2	.08
APR								
04...	--	4	<1	<1	43	0	1	.04
09...	--	0	<1	<1	42	0	1	.04
MAY								
02...	--	9	K1	--	44	--	6	.32
JUN								
09...	755	11	<1	--	20	0	8	2.4
10...	--	--	--	--	20	--	8	3.1
12...	--	8	<1	--	21	--	3	1.1
16...	754	8	K2	--	22	0	2	.70
18...	--	--	K7	--	18	--	23	11
19...	--	2	K2	--	19	--	6	2.5
23...	--	--	<1	--	21	--	5	1.9
25...	--	--	<1	--	18	--	29	16
27...	--	--	K1	--	19	--	4	1.8
JUL								
01...	752	--	K1	--	20	0	4	1.7
07...	748	--	K2	--	17	0	9	5.3
SEP								
09...	750	--	K6	--	32	0	--	--
25...	751	--	--	--	26	--	--	--

† DISCONTINUED GAGING STATION
K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15274550 - L CAMPBELL C AT NATHAN DR NR ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)
MAR								
18...	1600	1.6	230	6.6	.0	14.5	99	--
APR								
02...	1530	20	170	6.7	.0	13.1	90	--
03...	0615	10	200	6.5	.0	13.3	91	--
03...	1745	24	155	6.5	.0	12.5	86	--
04...	0745	15	180	6.3	.0	13.2	92	--
04...	2000	30	150	6.5	.0	12.3	85	--
05...	0745	17	180	6.6	.0	13.0	90	--
05...	1630	36	160	6.5	.0	12.8	90	--
06...	0630	14	180	6.8	.0	12.9	90	--
06...	1600	42	150	6.5	.0	12.2	85	--
07...	0900	22	170	6.6	.0	13.0	--	--
07...	1645	37	160	6.4	.0	12.4	--	--
08...	0900	25	175	6.7	.5	12.9	90	--
08...	1615	36	150	6.8	1.0	12.5	88	--
09...	0830	22	170	6.7	.0	13.1	--	--
09...	1630	27	170	6.6	1.5	11.8	--	--
10...	0830	20	180	6.4	.0	--	--	--
10...	1540	20	180	6.6	1.5	--	--	--
16...	1230	13	200	--	3.0	--	--	--
MAY								
02...	1200	10	190	7.1	4.5	12.8	84	--
JUN								
10...	1345	7.3	200	7.5	10.0	11.3	100	--
16...	1515	7.0	210	7.5	14.5	10.8	104	766
26...	1530	9.7	200	7.4	14.0	11.2	108	--
SEP								
08...	1800	4.7	240	7.5	7.0	13.4	110	756
09...	1235	--	245	7.6	8.0	--	--	--

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR								
18...	23	97	40	110	0	39	.17	--
APR								
02...	73	370	1200	66	0	198	11	--
03...	--	300	410	83	--	40	1.1	--
03...	71	280	1100	56	0	178	12	--
04...	--	210	380	67	--	30	1.2	--
04...	52	520	1300	55	0	121	9.8	84
05...	--	140	160	71	--	38	1.7	--
05...	67	340	580	57	0	196	19	--
06...	--	320	200	74	--	30	1.1	--
06...	--	470	K770	54	--	321	36	--
07...	34	96	490	66	0	42	2.5	--
07...	55	150	910	56	0	195	19	--
08...	--	140	300	66	--	50	3.4	--
08...	--	430	730	57	--	227	22	--
09...	32	190	260	67	0	98	5.8	--
09...	37	K220	320	61	0	92	6.7	--
10...	--	160	180	69	--	36	1.9	--
10...	--	--	--	70	--	--	--	--
16...	--	58	63	--	--	10	.35	--
MAY								
02...	15	25	--	99	--	9	.24	--
JUN								
10...	--	250	--	93	--	6	.12	--
16...	20	70	--	93	0	18	.34	--
26...	--	630	--	94	--	6	.16	--
SEP								
08...	--	K210	--	--	--	--	--	--
09...	--	160	190	--	--	--	--	--

K NON-IDEAL COLONY COUNT

YUKON ALASKA

†15477500 - CLEARWATER C NR DELTA JCT AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR 04...	1410	688	325	7.8	3.0	140	12	43	8.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
APR 04...	3.4	2.1	156	34	1.1	.1	13	182	184

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)
APR 04...	.47	.010	<10	<1	2	3.7	3.1	1.7	1.7

644322147192900 - TANANA R NR N POLE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT 03...	1420	17500	5.0	319	15100	10	13	17
JUN 24...	1145	26500	--	865	61900	16	23	31
JUL 17...	1300	48200	--	2840	370000	13	20	30
31...	1215	54800	--	2690	398000	14	21	30
AUG 12...	1315	51500	--	2900	403000	14	20	30
SEP 04...	1200	24600	--	478	31700	--	--	--
18...	1130	25500	--	1290	88800	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
OCT 03...	22	28	*34	*45	*86	*100	--
JUN 24...	37	45	54	76	97	100	--
JUL 17...	47	56	72	86	98	100	100
31...	41	52	70	89	99	100	--
AUG 12...	42	55	70	86	98	100	--
SEP 04...	--	--	*39	--	--	--	--
18...	--	--	*70	--	--	--	--

† DISCONTINUED GAGING STATION
* SIEVE ANALYSIS

YUKON ALASKA--Continued

644322147192900 - TANANA R NR N POLE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT 03...	34	45	86	100

635308148382000 - HEALY C NR USIBELLI AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
MAY 22...	1800	64	445	8.5	7.5	--	--	--	--	--	--
JUL 09...	1200	65	475	8.2	12.0	--	--	--	--	--	--
AUG 29...	1030	93	530	8.6	6.5	270	86	59	30	3.7	.8
SEP 22...	1700	127	553	8.4	2.5	260	120	58	28	3.5	1.0

DATE	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
MAY 22...	170	--	--	--	--	--	--	--	--	--	--
JUL 09...	176	--	--	--	--	272	--	--	--	--	--
AUG 29...	224	120	3.6	.1	2.7	328	332	.22	.000	.22	.000
SEP 22...	--	110	4.0	.1	3.8	292	294	--	--	.37	.010

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)
MAY 22...	300	290	10	900	0	0	--	--	0	--	0
JUL 09...	200	190	10	340	--	--	1	1	0	4	100
AUG 29...	100	90	10	2000	--	--	1	0	1	12	0
SEP 22...	600	590	10	1100	--	--	2	1	1	7	100

DATE	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)
MAY 22...	0	0	20	3	3	0	6	4	3	1	10
JUL 09...	100	0	15	2	2	0	4	0	0	0	0
AUG 29...	0	200	20	6	6	0	6	0	0	1	10
SEP 22...	100	0	35	7	7	0	5	0	0	0	10

YUKON ALASKA--Continued

635308148382000 - HEALY C NR USIBELLI AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)
MAY 22...	0	0	1	25	150	130	20	18000	67	22
JUL 09...	30	29	1	8	1800	1800	10	4600	15	10
AUG 29...	0	0	0	25	530	490	40	11000	0	0
SEP 22...	30	28	2	12	1100	1100	50	5500	4	4

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)
MAY 22...	45	10	20	10	10	340	3	3	0	30
JUL 09...	5	10	50	40	10	160	4	4	0	10
AUG 29...	0	20	20	10	10	330	3	0	3	20
SEP 22...	0	10	20	0	20	200	5	5	0	10

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	URANIUM NATURAL TOTAL (UG/L AS U)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	COAL IN BOTTOM MATE-RIAL (GM/KG)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY 22...	20	10	10	40	1.1	1.1	9.00	2	.35	49
JUL 09...	40	40	0	18	1.1	.80	6.00	93	16	15
AUG 29...	10	0	10	36	1.3	1.6	3.00	17	4.3	44
SEP 22...	80	60	20	24	1.7	2.0	5.00	83	28	45

635158148452700 - HEALY C 0.1 MI AB FRENCH GULCH NR USIBELLI AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
MAY 23...	1240	108	500	8.5	8.0	--	--	--	--	--	--
JUL 09...	1400	95	530	8.3	12.5	--	--	--	--	--	--
AUG 29...	0900	177	580	8.6	6.5	340	140	58	47	4.0	1.2
SEP 23...	0830	203	675	8.6	1.5	330	120	57	45	3.9	1.2

YUKON ALASKA--Continued

635158148452700 - HEALY C 0.1 MI AB FRENCH GULCH NR USIBELLI AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
MAY 23...	193	--	--	--	--	--	--	--	--	--	--
JUL 09...	200	--	--	--	--	292	--	--	--	--	--
AUG 29...	--	140	3.4	.1	2.6	338	378	.22	.010	.23	.000
SEP 23...	256	120	3.2	.1	3.8	375	364	--	--	.85	.010

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
MAY 23...	600	590	10	1800	0	0	--	--	0	--	0
JUL 09...	300	290	10	0	--	--	1	1	0	8	100
AUG 29...	100	80	20	1300	--	--	1	0	1	7	0
SEP 23...	1600	1600	40	750	--	--	3	2	1	7	100

DATE	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
MAY 23...	0	0	30	4	4	0	7	2	1	1	10
JUL 09...	100	0	35	6	6	0	6	0	0	1	10
AUG 29...	0	100	20	7	7	0	5	0	0	1	10
SEP 23...	0	100	35	12	12	0	5	2	2	0	10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
MAY 23...	0	0	1	22	2200	2200	20	16000	56	14	42
JUL 09...	30	28	2	19	1600	1600	20	7400	16	16	0
AUG 29...	0	0	0	18	880	800	80	12000	1	1	0
SEP 23...	30	28	2	12	3600	3600	30	7500	10	7	3

YUKON ALASKA--Continued

635158148452700 - HEALY C 0.1 MI AB FRENCH GULCH NR USIBELLI AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY 23...	10	60	50	10	350	95	95	0	30	20
JUL 09...	20	40	30	10	300	3	2	1	13	20
AUG 29...	10	30	10	20	220	2	0	3	20	30
SEP 23...	10	70	60	10	300	12	12	0	10	340

DATE	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	URANIUM NATURAL DISSOLVED (UG/L AS U)	URANIUM NATURAL TOTAL (UG/L AS U)	URANIUM DISSOLVED, EXTRACTION (UG/L)	COAL IN BOTTOM MATERIAL (GM/KG)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY 23...	10	10	40	--	1.7	1.2	1.00	126	37	52
JUL 09...	10	10	31	--	1.1	1.1	4.00	51	13	62
AUG 29...	20	10	31	--	2.1	2.2	5.00	20	9.6	45
SEP 23...	210	130	22	1.9	2.0	--	7.00	132	72	66

635104148525900 - HEALY CREEK NEAR SUNTRANA AK--Continued

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY 23...	1430	118	500	8.2	9.5	--	--	--	--	--	--
JUL 08...	1900	117	530	8.2	14.0	--	--	--	--	--	--
AUG 28...	1800	179	625	8.4	9.0	340	140	58	47	4.0	1.2
SEP 23...	1000	226	675	8.6	2.0	330	120	57	46	3.5	1.2

DATE	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
MAY 23...	190	--	--	--	--	--	--	--	--	--	--
JUL 08...	190	--	--	--	--	310	--	--	--	--	--
AUG 28...	--	130	3.0	.1	2.7	373	368	.23	.000	.23	.000
SEP 23...	258	130	3.0	.1	3.8	364	374	--	--	.48	.010

YUKON ALASKA--Continued

635104148525900 - HEALY CREEK NEAR SUNTRANA AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
MAY 23...	1900	1900	20	4000	0	0	--	--	0	--	100
JUL 08...	400	380	20	280	--	--	2	1	1	11	100
AUG 28...	300	280	20	1000	--	--	1	0	1	7	0
SEP 23...	1500	1500	0	1000	--	--	1	0	1	13	100

DATE	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
MAY 23...	100	0	60	3	3	0	12	7	6	1	20
JUL 08...	100	0	20	7	7	0	6	1	0	1	10
AUG 28...	0	100	10	9	9	0	7	0	0	1	10
SEP 23...	0	100	40	12	12	0	5	2	2	0	10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
MAY 23...	0	0	1	31	3500	3500	10	14000	43	9	34
JUL 08...	30	28	2	19	6600	6600	10	8300	11	5	6
AUG 28...	0	0	1	16	2800	2800	50	8700	4	4	0
SEP 23...	30	29	1	16	4600	4600	30	7000	8	8	0

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY 23...	10	160	130	30	330	13	13	0	40	30
JUL 08...	20	160	140	20	280	8	7	1	13	30
AUG 28...	10	90	70	20	290	6	1	5	20	40
SEP 23...	20	100	80	20	290	13	13	0	10	110

YUKON ALASKA--Continued

635104148525900 - HEALY CREEK NEAR SUNTRANA AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	URANIUM NATURAL DISSOLVED (UG/L AS U)	URANIUM NATURAL TOTAL (UG/L AS U)	URANIUM DISSOLVED, EXTRACTION (UG/L)	COAL IN BOTTOM MATERIAL (GM/KG)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY										
23...	30	0	55	--	1.9	1.0	9.00	368	117	59
JUL										
08...	20	10	28	--	2.0	1.2	4.00	354	112	29
AUG										
28...	0	50	26	--	2.0	1.5	2.00	101	49	41
SEP										
23...	110	0	23	2.5	2.1	--	11.0	232	142	80

635513148405000 - SANDERSON C 0.8 MI AB LIGNITE C NR USIBELLI AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAY											
23...	1000	4.4	630	7.9	4.0	--	--	--	--	--	--
JUL											
09...	0930	3.3	680	7.5	10.0	--	--	--	--	--	--
AUG											
28...	1600	12	720	8.3	8.5	380	210	62	54	4.9	1.9
SEP											
22...	1525	13	723	8.0	2.5	350	200	62	48	4.3	1.6

DATE	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)
MAY											
23...	137	--	--	--	--	--	--	--	--	--	--
JUL											
09...	170	--	--	--	--	485	--	--	--	--	--
AUG											
28...	--	210	.1	.5	2.1	464	439	.10	.000	.10	.000
SEP											
22...	178	210	.7	.6	3.5	442	420	--	--	.26	.010

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
MAY											
23...	600	570	30	3000	0	0	--	--	1	--	200
JUL											
09...	400	340	60	0	--	--	2	1	1	12	100
AUG											
28...	800	710	90	2000	--	--	3	2	1	13	0
SEP											
22...	1900	1800	90	880	--	--	2	1	1	15	100

YUKON ALASKA--Continued

635513148405000 - SANDERSON C 0.8 MI AB LIGNITE C NR USIBELLI AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
MAY 23...	200	0	70	5	5	0	11	25	20	5	20
JUL 09...	100	0	35	6	6	0	6	7	1	6	10
AUG 28...	0	100	50	17	16	1	7	13	8	5	10
SEP 22...	100	0	40	13	13	0	5	11	2	9	10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
MAY 23...	80	77	3	42	32000	32000	20	25000	59	8	51
JUL 09...	50	46	4	29	5100	5100	40	9100	13	9	4
AUG 28...	80	75	5	29	13000	13000	70	9700	13	13	0
SEP 22...	50	42	8	16	8500	8500	40	9500	9	6	3

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY 23...	10	1000	500	500	350	100	73	27	40	340
JUL 09...	20	610	30	580	330	42	9	33	20	190
AUG 28...	10	500	190	310	320	60	38	22	20	380
SEP 22...	20	490	80	410	300	54	16	38	20	430

DATE	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	URANIUM NATURAL DISSOLVED (UG/L AS U)	URANIUM NATURAL TOTAL (UG/L AS U)	URANIUM DISSOLVED, EXTRACTION (UG/L)	COAL IN BOTTOM MATERIAL (GM/KG)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY 23...	310	30	95	--	3.1	1.4	20.0	1270	15	77
JUL 09...	150	40	68	--	2.2	1.4	5.00	136	1.2	88
AUG 28...	210	170	69	--	2.6	1.7	25.0	343	11	80
SEP 22...	300	130	50	2.2	2.8	--	14.0	215	7.5	48

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

YUKON ALASKA--Continued

635442148534000 - FRANCES C 100 FT AB LIGNITE C NR SUNTRANA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)
JUL 08...	1700	.06	260	8.2	18.0	--	--	--	--	--	--	127
AUG 28...	1300	.29	230	8.2	10.0	100	0	24	9.7	8.4	1.1	--
SEP 22...	1300	.09	244	8.0	2.0	97	0	23	9.6	8.1	1.3	128

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)
JUL 08...	--	--	--	--	148	--	--	--	--	--	100	480
AUG 28...	15	.2	.1	13	144	139	.18	.000	.18	.000	100	100
SEP 22...	17	.5	.1	18	141	144	--	--	.71	.010	500	490

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)
JUL 08...	0	480	1	1	0	2	100	100	0	20	9	9
AUG 28...	0	2500	1	0	1	3	0	0	100	40	10	9
SEP 22...	10	1300	5	3	2	5	100	0	100	41	6	6

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
JUL 08...	0	4	0	0	1	0	0	0	2	5	1000
AUG 28...	1	8	0	0	1	10	0	0	2	12	1500
SEP 22...	0	6	1	1	0	10	50	46	4	8	510

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
JUL 08...	950	50	2000	12	7	5	10	140	20	120	72
AUG 28...	1400	70	4300	5	5	0	10	160	30	130	160
SEP 22...	410	100	3600	6	4	2	10	120	0	120	140

635442148534000 - FRANCES C 100 FT AB LIGNITE C NR SUNTRANA AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	URANIUM NATURAL TOTAL (UG/L AS U)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	COAL IN BOTTOM MATE-RIAL (GM/KG)
JUL 08...	4	4	0	3	20	10	10	11	<.60	.17	2.00
AUG 28...	6	2	4	10	70	50	20	25	.60	.17	2.00
SEP 22...	9	9	0	10	90	0	110	18	<.50	.14	5.00

635417148590100 - LIGNITE C 0.5 MI AB MOUTH NR HEALY AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
MAY 22...	1345	45	470	7.8	4.0	--	--	--	--	--	--
JUL 08...	1200	20	585	8.2	15.0	--	--	--	--	--	--
AUG 28...	1100	34	575	8.2	8.0	200	--	38	26	31	4.0
SEP 22...	1100	61	539	8.0	1.5	190	59	35	24	22	3.4

DATE	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY 22...	110	--	--	--	--	--	--	--	--	--	--
JUL 08...	160	--	--	--	--	331	--	--	--	--	--
AUG 28...	--	83	39	.3	7.1	324	--	.22	.000	.22	--
SEP 22...	160	81	27	.3	8.8	284	287	--	--	1.5	.080

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)
MAY 22...	--	23000	23000	30	2000	0	0	--	--	1	--
JUL 08...	--	500	450	50	500	--	--	4	3	1	4
AUG 28...	.000	1900	1900	30	3000	--	--	4	3	1	7
SEP 22...	.010	4600	4600	10	1500	--	--	4	2	2	9

635417148590100 - LIGNITE C 0.5 MI AB MOUTH NR HEALY AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)
MAY 22...	500	500	0	40	0	0	0	6	26	25	1
JUL 08...	200	100	100	50	24	24	0	6	6	5	1
AUG 28...	100	0	100	70	25	23	2	14	11	8	3
SEP 22...	200	200	0	75	18	18	0	8	10	5	5

DATE	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
MAY 22...	10	100	98	2	8	56000	56000	50	5500	72	26
JUL 08...	10	30	26	4	10	15000	15000	50	4600	30	13
AUG 28...	10	50	46	4	19	16000	16000	110	9200	12	12
SEP 22...	10	40	32	8	16	16000	16000	80	6000	14	14

DATE	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY 22...	46	10	1300	--	190	120	94	87	7	10	350
JUL 08...	17	10	450	240	210	140	30	23	7	10	140
AUG 28...	0	10	510	240	270	220	43	31	12	20	150
SEP 22...	0	10	500	310	190	200	41	33	8	20	240

DATE	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	URANIUM NATURAL DISSOLVED (UG/L AS U)	URANIUM NATURAL TOTAL (UG/L AS U)	URANIUM DISSOLVED, EXTRACTION (UG/L)	COAL IN BOTTOM MATERIAL (GM/KG)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY 22...	340	10	25	--	4.6	.51	12.0	2580	313	83
JUL 08...	120	20	26	--	1.5	.36	11.0	1220	66	25
AUG 28...	140	10	86	--	2.6	.62	11.0	485	45	83
SEP 22...	230	10	37	1.5	2.7	--	17.0	804	132	62

ARCTIC-SLOPE ALASKA

15880000 - COLVILLE RIVER NEAR NUIQSUT AK
(National stream-quality accounting network seasonal station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JUN 06...	1600	190000	64	6.2	3.5	200	11.6	K28	K12	31	1	9.3
SEP 10...	1500	15000	156	7.0	4.5	1.5	12.0	K1	<1	82	26	23

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
JUN 06...	1.9	2.3	1.1	32	5.8	1.9	.1	7.6	56	49	.14	.15
SEP 10...	5.9	2.8	.7	70	27	.6	.1	3.0	118	98	.69	.13

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 06...	.090	.090	2.0	1.3	2.1	.70	1.4	2.2	1.6	.560	.020	22
SEP 10...	.030	.050	.56	.46	.59	.08	.51	1.3	.64	.030	.020	--

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
JUN 06...	--	--	4	3	1	500	500	0	2	0	2	20
SEP 10...	6.4	.2	1	1	0	100	30	70	0	--	<1	0

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
JUN 06...	20	0	13	12	1	50	39	11	28000	28000	350	37
SEP 10...	0	0	0	--	<3	6	2	4	660	560	100	10

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)
JUN 06...	16	21	700	680	20	.2	.1	.1	46	42	4	1
SEP 10...	7	3	20	10	8	.0	.0	.0	5	4	1	0

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

ARCTIC SLOPE ALASKA--Continued

15880000 - COLVILLE RIVER NUIQSUT--Continued
(National stream-quality accounting network seasonal station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JUN 06...	1	0	0	0	0	170	150	20	910	467000	88
SEP 10...	0	0	1	1	0	20	10	10	27	1090	44

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	JUN 6,80	SEP 10,80
TIME	1600	1500
TOTAL CELLS/ML	1700	13
DIVERSITY: DIVISION	0.9	0.0
.CLASS	0.9	0.0
..ORDER	0.9	0.0
...FAMILY	1.7	0.0
....GENUS	1.8	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)				
.CHLOROPHYCEAE				
..CHLOROCOCCALES				
...OOCYSTACEAE				
....ANKISTRODESMUS	14	1	--	-
..VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS	--	-	13#	100
CHRYSOPHYTA				
.BACILLARIOPHYCEAE				
..PENNALES				
...ACHNANTHACEAE				
....ACHNANTHES	27	2	--	-
...CYMBELLACEAE				
....AMPHORA	27	2	--	-
....CYMBELLA	27	2	--	-
...DIATOMACEAE				
....DIATOMA	96	6	--	-
...FRAGILARIACEAE				
....FRAGILARIA	41	2	--	-
....SYNEDRA	82	5	--	-
...GOMPHONEMATACEAE				
....GOMPHONEMA	27	2	--	-
...NAVICULACEAE				
....NAVICULA	55	3	--	-
...NITZSCHIACEAE				
....NITZSCHIA	110	6	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)				
.CYANOPHYCEAE				
..HORMOGONALES				
...OSCILLATORIACEAE				
....OSCILLATORIA	1200#	70	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

SOUTHEAST ALASKA

580502134371400 - GREENS C AB BIG SORE C NR JUNEAU AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	* TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAY 23...	1430	53	103	7.5	6.0	--	11.8	42	12	14	1.7
SEP 23...	1430	94	106	7.6	6.5	7	11.6	37	5	13	1.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, VOLA-TILE, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
MAY 23...	1.2	.1	45	10	1.9	.0	3.5	--	51	--	.06
SEP 23...	1.1	.2	39	7.2	1.2	.0	3.4	60	47	46	.00

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
MAY 23...	--	--	--	--	--	--	--	--	--	1
SEP 23...	.000	.32	.32	.32	.030	.000	80	40	40	1

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)
MAY 23...	0	0	0	0	80	60	20	6	10	6
SEP 23...	0	0	--	8	160	--	--	3	0	--

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAY 23...	4	.0	--	1	0	30	--	--	--	--
SEP 23...	--	.5	6	0	0	20	0	.0	2	.51

SOUTHEAST ALASKA--Continued

580500134371900 - BIG SORE C NR JUNEAU AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAY 23...	1330	8.0	140	7.6	5.0	--	12.6	60	21	16	4.8
SEP 23...	1350	15	166	7.9	6.5	4	11.4	56	8	16	4.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, VOLA-TILE, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
MAY 23...	1.1	.2	55	18	.9	.0	3.8	--	68	--	.00
SEP 23...	1.4	.3	53	21	1.4	.0	3.5	70	71	60	.00

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC, DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
MAY 23...	--	--	--	--	--	--	--	--	--	1
SEP 23...	.000	.49	.49	.49	.010	.000	90	60	30	1

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)
MAY 23...	100	0	0	0	500	460	40	6	10	7
SEP 23...	0	1	--	5	220	--	--	2	10	--

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
MAY 23...	3	.1	--	1	0	60	--	--	--	--
SEP 23...	--	.2	4	1	0	30	0	.0	5	.20

580500134373300 - EAST MINE DRAINAGE C NR JUNEAU AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
MAY 23...	1130	.47	172	7.5	4.0	--	12.6	73	36	19
SEP 23...	1130	.98	--	7.7	6.5	14	11.4	63	42	15

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTHEAST ALASKA--Continued

580500134373300 - EAST MINE DRAINAGE C NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY 23...	6.1	2.3	.3	56	33	1.3	.0	6.6	--	91
SEP 23...	6.3	2.6	.4	25	39	2.5	.1	5.3	108	85

DATE	SOLIDS, VOLATILE, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)
MAY 23...	--	.02	--	--	--	--	--	--	--	--
SEP 23...	65	.16	.000	.54	.54	.70	.010	.000	150	80

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAY 23...	--	1	0	0	0	0	90	40	50	2
SEP 23...	70	1	0	0	--	7	190	--	--	4

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	TANNIN AND LIGNIN (MG/L)
MAY 23...	10	0	10	.0	--	2	0	40	--	--
SEP 23...	40	--	--	1.0	7	1	0	70	0	1.0

580438134374000 - UPPER WEST MINE DRAINAGE C NR JUNEAU AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
MAY 23...	1000	E.01	820	7.2	7.0	--	8.4	320	180	47	50
SEP 23...	1130	.01	>1000	6.4	8.0	30	--	560	--	83	86

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, VOLATILE, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
MAY 23...	39	7.8	170	240	2.8	.0	7.0	--	489	--	1.7
SEP 23...	25	8.1	--	510	2.7	.1	6.0	595	--	792	3.5

E ESTIMATED

SOUTHEAST ALASKA--Continued

580438134374000 - UPPER WEST MINE DRAINAGE C NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
MAY 23...	--	--	--	--	--	--	--	--	--	1
SEP 23...	.670	1.1	1.8	5.3	.010	.000	100	10	90	2

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
MAY 23...	100	0	0	1	1400	460	940	4	2300	0
SEP 23...	100	1	--	4	790	--	--	0	2700	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
MAY 23...	2300	.1	--	0	0	20	--	--	--	--
SEP 23...	--	.2	13	0	0	180	0	1.0	2	.00

580447134375600 - WEST MINE DRAINAGE C ABOVE TR NR JUNEAU AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
MAY 22...	1500	.07	530	7.8	5.0	--	11.4	230	110	37	33
SEP 23...	1515	.16	760	7.7	7.0	9	--	300	--	49	42

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, VOLATILE, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
MAY 22...	19	2.8	160	120	2.3	.0	5.2	--	306	--	3.2
SEP 23...	19	3.9	--	250	2.9	.1	5.2	500	--	423	4.6

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
MAY 22...	--	--	--	--	--	--	--	--	--	4
SEP 23...	.270	.83	1.1	5.7	.010	.000	130	100	30	2

SOUTHEAST ALASKA--Continued

580447134375600 - WEST MINE DRAINAGE C ABOVE TR NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
MAY 22...	0	2	0	0	70	50	20	6	450	0
SEP 23...	0	1	--	6	310	--	--	6	1600	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
MAY 22...	460	.0	--	1	0	60	--	--	--	--
SEP 23...	--	.2	32	1	0	110	0	1.0	2	.00

580455134380500 - WEST MINE DRAINAGE C NR JUNEAU AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
MAY 22...	1300	.45	209	7.7	4.5	--	12.2	82	50	19	8.4
SEP 23...	1455	.68	295	7.6	6.0	7	11.8	100	--	22	12

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, VOLATILE, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
MAY 22...	4.6	.6	40	40	1.9	.0	7.0	--	102	--	.30
SEP 23...	5.7	1.0	--	85	2.1	.1	7.1	185	--	161	1.6

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
MAY 22...	--	--	--	--	--	--	--	--	--	1
SEP 23...	.040	.61	.65	2.3	.010	.000	100	60	40	1

DATE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)
MAY 22...	0	0	0	0	120	90	30	1	50	10
SEP 23...	100	0	--	21	190	--	--	3	260	--

SOUTHEAST ALASKA--Continued

580455134380500 - WEST MINE DRAINAGE C NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
MAY 22...	40	.0	--	2	0	20	--	--	--	--
SEP 23...	--	.3	11	2	0	60	0	.0	2	.00

580444134383700 - GREENS C BL WEST MINE DRAINAGE C NR JUNEAU AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
MAY 22...	1230	59	112	7.2	4.0	--	12.1	48	5	15
SEP 23...	1300	--	105	--	6.5	8	--	47	--	14

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY 22...	2.5	1.3	.1	52	10	.8	.0	3.7	--	59
SEP 23...	2.8	1.4	.8	--	9.5	1.3	.0	3.6	65	--

DATE	SOLIDS, VOLATILE, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)
MAY 22...	--	.03	--	--	--	--	--	--	--	--
SEP 23...	50	.00	.000	.41	.41	.41	.010	.000	100	60

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAY 22...	--	1	0	0	0	0	90	80	10	1
SEP 23...	40	1	0	0	--	7	170	--	--	3

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	SEDIMENT, SUSPENDED (MG/L)
MAY 22...	0	<3	.0	--	1	0	10	--	--	--
SEP 23...	10	--	.4	6	1	0	20	0	.0	2

SOUTH-CENTRAL ALASKA

600524149192900 - FOURTH OF JULY C .9 MI AB MOUTH NR SEWARD AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
AUG 27...	1520	341	50	3.0	21	10	7.3	.6	1.0	.6

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)
AUG 27...	16	0	7.8	5.1	.1	2.1	31	.00	3	30

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
AUG 27...	<1	0	0	50	0	2	.0	<3	32	29

610256149441300 - POTTER C (UPPER) NR ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	COLOR (PLAT-INUM COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT 24...	1300	1.3	120	7.3	1.0	5	13.3	100	709	K4
MAR 25...	1130	.52	125	6.9	.5	5	13.7	100	716	<1

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
OCT 24...	<1	52	13	17	2.4	1.5	.2	48	0
MAR 25...	<1	60	16	19	3.0	2.1	.3	53	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT 24...	19	.8	.0	8.0	81	76	.79	.010	.56
MAR 25...	15	.5	.0	10	78	80	1.0	.020	.38

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

610256149441300 - POTTER C (UPPER) NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 24...	.57	1.4	.000	2	30	0	1	2	.01
MAR 25...	.40	1.4	.010	1	20	0	<1	0	.00

610313149453300 - POTTER C (AT RAVINE PARK) NR ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
OCT 24...	1515	1.5	122	7.2	1.0	13.4	100	716	K14	K6	50	0
MAR 25...	1545	.71	135	7.1	.5	--	--	--	<1	<1	57	0

610308149473300 - POTTER C AT POTTER NR ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT 24...	1430	2.2	140	7.3	1.5	5	13.7	100	739	K4
MAR 25...	1400	.78	160	7.3	1.0	5	14.1	100	747	<1

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
OCT 24...	K3	66	16	21	3.2	2.1	.3	61	0
MAR 25...	<1	82	19	26	4.2	3.4	.4	77	0

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
OCT 24...	17	.9	.1	8.9	74	88	1.1	.000	.67
MAR 25...	13	.8	.1	11	99	103	1.4	.020	.49

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

610308149473300 - POTTER C AT POTTER NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 24...	.67	1.8	.000	1	20	0	1	2	.01
MAR 25...	.51	1.9	.010	1	10	0	<1	2	.00

610421149432600 - LITTLE RABBIT C AT NICKLEEN ST NR ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT 25...	1045	2.3	100	6.7	2.0	5	13.0	99	714	K5
MAR 26...	1045	1.0	135	7.1	.5	5	13.6	99	714	<1

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
OCT 25...	K2	44	11	14	2.3	1.6	.2	41	0
MAR 26...	K1	64	16	20	3.4	2.6	.3	59	0

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
OCT 25...	14	.7	.0	8.0	47	63	.45	.010	.56
MAR 26...	15	.8	.1	10	69	84	.59	.020	.51

DATE	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 25...	.57	1.0	.010	1	20	0	2	1	.01
MAR 26...	.53	1.1	.010	1	<10	0	<1	2	.01

610449149433900 - LITTLE RABBIT C TRIB NR ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT 25...	1130	.77	150	6.8	2.0	5	13.2	101	714	K2
MAR 26...	1545	--	165	7.5	.0	5	13.7	99	719	<1

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

610449149433900 - LITTLE RABBIT C TRIB NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
OCT									
25...	K3	67	8	20	4.1	1.9	.2	72	0
MAR									
26...	K1	83	19	24	5.7	2.4	.3	79	0

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
OCT									
25...	15	1.7	.0	8.6	85	91	.97	.020	.94
MAR									
26...	13	2.6	.1	10	96	101	.90	.060	1.0

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT									
25...	.96	1.9	.000	1	30	0	10	3	.01
MAR									
26...	1.1	2.0	.010	1	30	0	6	0	--

610454149462000 - LITTLE RABBIT C AT GOLDENVIEW DR NR ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT										
25...	1245	3.4	123	6.9	2.0	0	13.5	102	730	K4
MAR										
26...	1215	2.1	150	7.2	.5	5	14.0	100	732	<1

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
OCT									
25...	K3	52	8	16	2.9	1.9	.2	54	0
MAR									
26...	K1	72	15	22	4.1	2.8	.3	69	0

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
OCT									
25...	15	1.1	.0	8.7	83	75	.54	.000	.62
MAR									
26...	14	1.3	.1	11	90	92	.63	.020	.35

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

610454149462000 - LITTLE RABBIT C AT GOLDENVIEW DR NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT									
25...	.62	1.2	.000	2	40	0	4	2	.02
MAR									
26...	.37	1.0	.010	1	20	0	<1	1	.01

611022149515800 - CAMPBELL C BL OLD SEWARD HWY AT ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP										
09...	1120	100	85	6.0	12.2	98	754	K13	35	0

610922149522800 - CAMPBELL C AB L CAMPBELL C NR ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP											
09...	1315	98	86	7.1	6.5	12.0	98	759	K18	36	0

610659149443300 - L CAMPBELL C AT HILLSIDE DR AT ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP											
08...	1620	1.5	158	7.1	6.0	12.2	100	735	20	80	0

610740149462100 - L CAMPBELL C TR AT BIRCH RD AT ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE, WATER (DEG C)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
SEP					
08...	1650	E.10	210	9.0	K9

610743149474200 - L CAMPBELL C AT LIPSCOMB ST AT ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP												
08...	1440	1.1	185	7.2	6.5	12.0	98	749	K7500	--	98	0
09...	1040	--	--	--	6.0	--	--	--	2100	K280	--	--

E ESTIMATED
K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

610817149490700 - L CAMPBELL C AT ABBOTT RD NR ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 08...	1350	2.6	200	7.2	6.0	12.1	98	751	1900	103	0

610844149495400 - L CAMPBELL C AT LAKE OTIS PKWY AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 08...	1300	2.2	200	7.2	6.5	12.2	100	754	470	104	0

610911149514900 - L CAMPBELL C BL 76TH AVE AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 08...	1145	2.7	220	6.8	7.0	12.4	102	757	200	110	0

610914149514600 - L CAMPBELL C TR BL OLD SEWARD HY AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 08...	1050	3.0	340	7.0	7.5	11.7	98	757	56	134	0

15274500 - L CAMPBELL C NR ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 08...	1530	1.6	160	7.2	6.5	11.9	98	743	K8	--	82	0
09...	1030	--	--	--	6.0	--	--	--	K8	K5	--	--

610921149523100 - CAMPBELL C BL L CAMPBELL C AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 09...	1415	108	92	7.0	7.0	11.7	96	759	K18	39	0

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

15274710 - CAMPBELL LAKE OUTLET NEAR SPENARD AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
SEP 09...	1710	95	7.1	8.0	11.8	99	764	K9

611125149421300 - SB OF SF CHESTER C AT TANK TR NR ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 12...	0900	6.8	108	7.2	6.0	3.5	13.3	100	762	110	47	0

611143149455700 - SB SF CHESTER C AT N LTS BLVD AT ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 12...	1000	14	150	7.1	7.0	3.5	13.1	98	767	53	71	0

15274970 - SF CHESTER C AT NO LIGHTS BLVD NR ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 12...	1145	19	182	6.9	8.0	5.0	12.8	99	770	26	79	0

611220149470400 - MF CHESTER C AT RUSSIAN JACK PARK ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 12...	1030	3.4	260	6.7	7.0	4.5	11.8	91	770	<1	127	0

611207149483600 - MF CHESTER C AT NICHOLS ST AT ANCHORAGE AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
SEP 12...	1115	3.1	320	6.8	8.0	5.0	12.7	98	769	90	142	0

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

611220149503600 - NF CHESTER C BL 15TH AVE AT ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
SEP												
12...	1240	1.2	375	6.5	8.0	7.5	12.0	98	770	<1	110	0

15275000 - CHESTER CREEK AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
SEP												
12...	1215	21	210	6.8	7.0	5.0	12.9	100	770	31	89	0

15275050 - CHESTER C AT SEWARD HIGHWAY NEAR ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)
SEP												
12...	1410	24	225	6.6	7.0	5.5	12.8	100	771	38	92	0

611331149161500 - EAGLE R TRIB AT CHUGACH PK BRIDGE NR EAGLE RIVER

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
SEP										
26...	1230	15	195	5.0	95	23	32	3.6	2.7	.4

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)
SEP										
26...	26	.6	.0	5.8	123	118	.75	.010	2	20

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
SEP									
26...	<1	0	4	40	2	5	.0	0	20

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

614906149385000 - PETERS C BL PURCHES C NR WILLOW AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 24...	1015	138	35	6.4	3.0	1.0	12.5	95	683	K7	K1
APR 02...	1015	21	49	6.4	10.0	.0	13.0	94	719	<1	<1

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 24...	13	0	4.5	.4	1.3	.6	16	0	3.0	1.0	.0
APR 02...	16	1	5.3	.7	2.2	.7	18	0	.1	3.0	.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 24...	6.1	20	25	.14	.11	.040	.58	.62	.76	.000
APR 02...	7.6	32	29	.19	.19	.010	.35	.36	.55	.010

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT 24...	.000	1	200	0	8	3	20	--	<10	7
APR 02...	.010	1	0	0	10	4	30	20	10	3

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 24...	4	3	1	.2	0	0	0	.00	<1	.00
APR 02...	0	0	1	.0	0	0	10	.00	3	.17

15294007 - DECEPTION C AB TR NR HOUSTON AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 24...	1200	18	112	7.0	1.5	1.0	13.1	98	714	49	K2
APR 02...	1200	5.5	205	7.0	7.0	.5	13.2	94	740	<1	<1

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15294007 - DECEPTION C AB TR NR HOUSTON AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 24...	29	2	8.7	1.7	9.6	.9	33	0	4.1	12	.0
APR 02...	50	6	15	3.0	22	1.8	54	0	.7	36	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT 24...	11	52	65	.14	.12	.020	.38	.40	.54	.000
APR 02...	14	121	120	.20	.20	.010	.36	.37	.57	.020

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT 24...	.000	2	200	0	0	1	230	--	170	3
APR 02...	.010	1	100	0	10	3	160	70	90	3

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 24...	30	20	10	.1	0	0	0	.00	1	.05
APR 02...	10	3	7	.0	0	0	10	.00	4	.06

15294008 - DECEPTION C TR NR HOUSTON AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 24...	1245	7.7	125	6.9	1.0	1.0	12.8	96	714	K13	K1
APR 02...	1315	3.1	180	6.8	9.0	.0	12.6	89	742	K2	<1

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 24...	33	1	9.9	1.9	11	1.0	38	0	4.1	13	.0
APR 02...	43	4	13	2.6	17	1.6	48	0	1.3	28	.1

K NON-IDEAL COLONY COUNT

15294008 - DECEPTION C TR NR HOUSTON AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT 24...	12	60	73	.27	.22	.020	.42	.44	.71	.010
APR 02...	14	104	102	.23	.23	.030	.49	.52	.75	.010

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT 24...	.000	1	200	0	0	6	380	--	270	11
APR 02...	.010	1	0	1	10	3	300	140	160	3

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 24...	60	0	60	.1	0	0	0	.00	0	.00
APR 02...	40	0	40	.0	0	0	20	.00	2	.02

614446149551000 - UNNAMED TRIB TO DECEPTION C NR WILLOW AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 24...	1400	6.4	105	6.9	.0	.5	13.0	96	731	K18	K2
APR 02...	1530	7.1	105	6.5	9.0	.0	12.1	83	761	23	<1

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 24...	36	2	11	2.1	8.1	.7	42	0	5.2	9.7	.0
APR 02...	32	2	9.3	2.1	7.6	1.0	37	0	2.0	10	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT 24...	15	58	74	.22	.18	.050	.48	.53	.75	.010
APR 02...	14	66	64	.19	.19	.010	.47	.48	.67	.030

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

614446149551000 - UNNAMED TRIB TO DECEPTION C NR WILLOW AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT										
24...	.080	1	200	0	10	--	740	--	650	4
APR										
02...	.020	1	0	1	10	3	840	440	400	3

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT										
24...	50	0	50	.0	0	0	140	.00	3	.05
APR										
02...	60	60	<1	.0	0	0	10	.00	13	.25

15294012 - WILLOW C AT PARKS HWY NR WILLOW AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
25...	0930	336	80	6.8	3.0	2.0	12.8	95	740	K10	<1
APR											
01...	1100	136	125	6.6	9.0	.0	13.2	90	760	K4	<1

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT											
25...	23	0	7.1	1.3	4.5	.7	28	0	4.1	7.0	.0
APR											
01...	36	8	11	2.1	9.3	1.0	34	0	1.0	17	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT										
25...	8.1	53	47	.10	.11	.010	.12	.13	.23	--
APR										
01...	11	78	70	.17	.17	.010	.43	.44	.61	.020

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT										
25...	--	1	200	0	0	8	190	--	90	3
APR										
01...	.010	1	100	0	10	3	300	160	140	3

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15294012 - WILLOW C AT PARKS HWY NR WILLOW AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 25...6	10	0	10	.1	0	0	0	.00	1	.91
APR 01...6	40	0	40	.0	0	0	10	.00	12	4.4

610345151130300 - TYONEK C NR TYONEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	BICARBONATE (MG/L AS HCO3)
JUL 25...	1215	14	85	6.8	11.5	70	42

610241151202600 - UNNAMED TR TO OLD TYONEK C NR TYONEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	BICARBONATE (MG/L AS HCO3)
JUL 25...	1130	5.6	40	5.8	13.5	70	14

610245151202500 - OLD TYONEK C NR TYONEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	BICARBONATE (MG/L AS HCO3)
JUL 25...	1120	7.2	65	6.4	12.0	>70	31

610446151341400 - UNNAMED TR TO NIKOLAI C NR TYONEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLOR (PLATINUM COBALT UNITS)	BICARBONATE (MG/L AS HCO3)
JUL 25...	1020	.35	50	6.0	9.0	10	20

SOUTHWEST ALASKA

595208159261200 - IZAVIEKNIK R INLET UPPER TOGIAK LK NR TOGIAK AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
AUG 22...	1418	192	70	7.2	6.0	11.7	32

594822159293000 - IZAVIEKNIK R OUTLET UPPER TOGIAK LK NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
AUG 23...	1048	505	65	7.3	9.0	10.9	30

594727159303000 - TRAIL C AB MOUTH NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
AUG 26...	1656	828	80	7.3	9.0	10.0	33

594310159324200 - IZAVIEKNIK R AT INLET TOGIAK LK NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
AUG 28...	1202	1760	70	7.2	8.0	10.0	28

593721159383000 - WEST C NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
AUG 29...	1032	76	30	6.9	11.0	10.0	12

593524159364900 - BRUIN C NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
AUG 30...	0949	34	70	7.2	5.5	11.3	27

SOUTHWEST ALASKA--Continued

593157159413900 - TOGIAK R AT TOGIAK LK OUTLET NR TOGIAK AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
AUG 31...	1136	2310	60	7.5	8.0	11.5	25

592348159504200 - TOGIAK R BL ONGIVINUK R NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
SEP 02...	1527	3240	60	7.3	7.5	11.5	25

592236160002400 - NAROGURUM R NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
SEP 04...	0952	589	60	7.3	5.5	11.6	26

591644160114800 - TOGIAK R AB PUNGOKEPUK C NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
SEP 06...	1615	3280	60	7.8	8.0	12.8	27

591533160112400 - PUNGOKEPUK C AB TOGIAK R NR TOGIAK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
SEP 07...	1400	327	57	7.6	6.0	12.0	28

YUKON ALASKA

644132147270800 - TANANA R AB MOOSE C DAM AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
SEP					
04...	1500	24600	596	39600	31
18...	1400	25500	1410	97100	75

644650147423600 - TANANA R AB GOOSE ISLAND NR FAIRBANKS AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
SEP					
05...	1030	23500	597	37900	33
17...	1040	22700	1130	69300	42

644704147443100 - TANANA R BL GOOSE ISLAND NR FAIRBANKS AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
SEP					
05...	0830	23500	497	31500	39
17...	1000	22700	979	60000	50

644752147564800 - TANANA R AT BYERS ISLAND NR FAIRBANKS AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
SEP					
03...	1100	25500	395	27200	45
16...	1030	19300	360	18800	42

644526147193800 - CHENA SL AT MISSION RD AT NORTH POLE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
APR										
24...	1055	3.0	310	2.0	0	4	130	9	38	8.2

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
APR									
24...	19	1.3	.2	16	172	.04	.010	1	2900

644721147230300 - CHENA SL BL "C" DITCH NR NORTH POLE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
APR 24...	1330	25	305	7.4	1.5	0	6	120	12	36	7.9

DATE	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
APR 24...	150	17	1.9	.2	19	165	.36	.010	3	4200

15512000 - CHENA SL NR FAIRBANKS AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
APR 25...	1315	44	360	7.6	7.0	0	0	140	10	42	8.5

DATE	BICARBONATE (MG/L AS HCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
APR 25...	170	17	1.6	.2	20	190	.08	.020	2	520

NORTHWEST ALASKA

665642156450600 - KOGOLUKTUK R NR MOUTH NR KOBUK AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
APR 02...	1327	63	260	7.1	.5	14.0	116

665412156530600 - KOBUK R AB KOBUK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
APR 02...	1525	1240	170	6.6	.0	8.9	86

671154158324200 - HUNT R NR AMBLER AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
MAR 28...	1418	164	110	6.7	.0	9.1	47

665330160181500 - PORTAGE C NR KIANA AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)
MAR 25...	0906	E.50	215	.0

670509160173600 - CANYON C NR KIANA AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)
MAR 23...	1520	1.8	220	7.6	.5

670200160240000 - SQUIRREL R NR KIANA AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
MAR 24...	1251	26	330	7.0	.5	8.5	204

E ESTIMATED

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

NORTHWEST ALASKA--Continued

665604160301200 - KOBUK R AT OKOK POINT NR KIANA AK

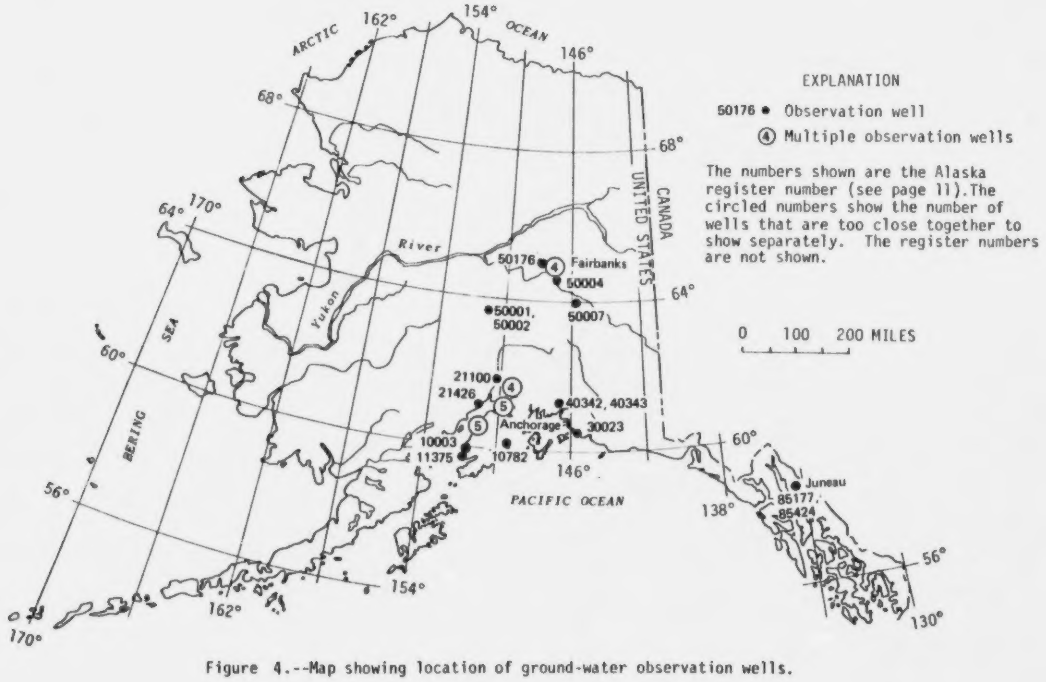
WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE (MG/L AS HCO3)
APR							
05...	1417	1860	170	6.6	.0	7.9	117

ARCTIC SLOPE ALASKA

700822150553200 - ITKILLIK R NR NUIQSUT AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	PH FIELD (UNITS)	BICAR-BONATE (MG/L AS HCO3)
SEP				
10...	1230	1410	6.8	81


ARCTIC
OCEAN
162°
154°
146°
68°
68°
170°
64°
64°
60°
60°
56°
56°
BERING
SEA
Yukon
River
UNITED STATES
CANADA
50176
4
Fairbanks
50004
50001, 50002
50007
21100
4
21426
5
5
Anchorage
40342, 40343
30023
10003
11375
10782
146°
PACIFIC OCEAN
138°
Juneau
85177, 85424
130°
154°
162°
170°
0 100 200 MILES

EXPLANATION

50176 ● Observation well

④ Multiple observation wells

The numbers shown are the Alaska register number (see page 11). The circled numbers show the number of wells that are too close together to show separately. The register numbers are not shown.

Figure 4.--Map showing location of ground-water observation wells.

SOUTHEAST ALASKA

JUNEAU

582422134342001. Local number, CD04006618ABDD1001 85177.
LOCATION.--Lat 58°24'22", long 134°34'20", Hydrologic Unit 19060000, Mendenhall Loop Road, near Juneau.
Owner: U.S. Forest Service.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored unused water-table well, diameter 6 in (0.15 m), depth 100 ft (30.5 m), screened 90 to 100 ft (27.4 to 30.5 m).
DATUM.--Altitude of land-surface datum is 69 ft (21.0 m). Measuring point: Base of recorder shelter 5.00 ft (1.52 m) above land-surface datum.
REMARKS.--Water level-fluctuates with seasonal changes in flow of the Mendenhall River, 100 ft (30 m) southwest of the well.
PERIOD OF RECORD.--June 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.00 ft (0.61 m) above land-surface datum, Sept. 29, 1980; lowest, 10.26 ft (3.13 m) below land-surface datum, Mar. 23, 1969.

WATER LEVEL, IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM , WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-2.06	-4.42	-3.60	-4.03	---	-5.57	-5.41	-3.15	-4.98	-4.21	.21	-1.18
10	-0.60	-4.96	-3.62	-4.03	---	-5.67	-5.57	-3.40	-5.11	-2.85	-0.35	-0.93
15	-0.73	-4.63	-4.39	-4.03	---	-6.03	-4.87	-3.76	-4.36	-3.16	-0.71	-1.21
20	-2.00	-3.56	-4.42	-6.90	---	-6.40	-4.09	-3.92	-3.60	-3.13	.60	-1.70
25	-3.05	-2.17	-3.76	-6.19	---	-5.90	-3.54	-4.43	-3.14	-2.27	-0.14	-0.87
EOM	-4.19	-2.95	-4.03	-7.00	-5.86	-5.81	-3.55	-4.78	-3.61	-1.15	-1.32	-0.20

WTR YEAR 1980 HWL 2.00 SEPT 29 LWL RECORDED -7.00 JAN 30 & 31

582341134340001. Local number, CD04006617CDDC1001 85424.
LOCATION.--Lat 58°23'41", long 134°33'09", Hydrologic Unit 19060000, Thunder Mountain Road, near Juneau.
Owner: U.S. Forest Service
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 6 in (0.15 in), depth 82 ft (25.0 m), screened 78 to 82 ft (23.8 to 25.0 m).
DATUM.--Altitude of land-surface datum is 100 ft (30.5 m). Measuring point: Base of recorder shelter 1.5 ft (0.45 m) above land-surface datum.
PERIOD OF RECORD.--December 1979 to September 1980.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.60 ft (2.02 m) below land-surface datum, June 24, 1980; lowest, 11.20 ft (3.41 m) below land-surface datum, Mar. 20, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	8.53	10.18	9.91			9.09	8.54		
10			---	9.38	8.18	10.23			9.52	---		
15			8.19	10.20	8.51	10.71			7.87	---		
20			8.51	11.04	9.26	11.17			7.26	---		
25			7.41	10.33	10.03	10.79			6.67	---		
EOM			7.61	10.19	10.39	---			7.55	---		

WTR YEAR 1980 HWL RECORDED 6.60 JUN 24 LWL RECORDED 11.20 MAR 20

SOUTH-CENTRAL ALASKA

CORDOVA

603228145442601. Local number, CC01500327BDCB1004 30023.

LOCATION.--Lat 60°32'28", long 145°44'26", Hydrologic Unit 19050003, Lefeure Street near west end of Eyak Lake, Cordova. Owner: City of Cordova.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Drilled public-supply (unused) artesian well, diameter 10 in (0.25 m), depth 82 ft (25.0 m), backfilled to 71 ft (21.6 m), screened 48.5 to 71 ft (14.8 to 21.6 m).

DATUM.--Altitude of land surface is 32 ft (10 m). Measuring point: Top of shelter floor 4.00 ft (1.22 m) above land surface.

REMARKS.--Major water-level fluctuations caused by variable pumping of nearby production wells.

PERIOD OF RECORD.--February 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.82 ft (2.08 m) below land-surface datum, Nov. 30, 1976; lowest, 46.88 ft (14.29 m) below land-surface datum, Dec. 28, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.33	9.07	13.80	15.92	10.89	15.00	14.52	14.30	14.24	14.67	18.42	15.18
2	13.00	9.40	14.02	15.82	10.16	15.10	14.31	14.30	14.35	14.67	18.40	15.15
3	12.75	9.70	14.25	15.82	10.17	15.18	14.30	14.31	14.47	14.80	18.31	15.08
4	12.27	10.01	14.15	16.39	10.06	15.27	14.33	14.30	14.56	14.81	18.26	15.08
5	8.47	10.34	14.09	22.67	9.46	15.21	14.46	14.30	14.60	14.85	18.25	15.14
6	8.04	10.51	14.33	17.32	9.23	15.20	14.52	11.82	14.63	14.76	18.07	15.20
7	8.19	10.61	14.39	16.20	9.26	15.17	14.64	11.20	14.67	14.50	18.27	15.24
8	8.53	10.84	14.46	14.05	9.76	15.03	14.75	11.20	14.73	14.40	18.65	15.07
9	7.82	13.00	14.71	16.60	10.01	15.00	14.74	11.21	14.81	14.38	18.94	14.80
10	7.81	10.02	11.84	16.75	9.85	15.00	14.76	14.09	14.91	14.50	18.93	14.73
11	7.89	8.50	14.03	17.46	9.85	14.47	14.34	11.74	14.98	14.24	27.30	14.73
12	12.10	8.28	15.14	16.73	9.93	15.62	13.27	11.42	15.00	13.57	19.53	14.77
13	12.43	8.27	15.28	15.40	14.25	15.76	13.88	13.69	14.99	13.44	18.59	14.79
14	12.75	8.40	15.43	13.93	14.72	18.15	14.05	14.44	14.99	20.20	18.30	14.70
15	13.17	9.05	15.60	22.88	14.89	16.47	14.19	13.54	15.01	22.18	18.19	14.58
16	13.52	9.02	15.49	23.73	15.02	15.80	14.36	14.33	15.04	18.64	18.23	14.58
17	13.70	13.04	15.49	17.38	15.08	15.76	14.50	12.85	14.86	18.47	18.21	14.60
18	13.83	13.78	15.16	14.85	15.78	22.75	14.60	13.56	14.73	18.41	23.88	14.63
19	13.99	13.89	15.10	12.46	15.54	23.23	14.67	13.27	14.70	18.28	18.08	14.70
20	14.18	10.50	14.98	10.80	15.73	21.75	14.83	13.80	14.47	18.25	16.33	14.86
21	14.29	9.94	15.08	9.55	15.87	18.05	14.61	14.10	14.27	18.12	31.30	14.92
22	14.34	13.30	15.17	9.22	15.84	23.33	14.40	14.29	14.27	17.91	32.90	14.99
23	14.40	13.24	15.49	9.38	15.27	16.97	14.32	14.47	14.32	17.73	33.63	15.02
24	13.75	13.81	14.00	9.93	15.14	16.60	12.22	14.61	14.46	17.60	33.95	14.70
25	13.66	13.94	13.14	10.29	15.14	17.98	14.19	14.61	14.56	17.47	33.31	14.62
26	13.47	14.14	15.32	10.60	15.15	16.18	14.30	14.70	14.56	17.60	24.55	14.45
27	13.93	14.20	15.46	10.77	15.20	15.93	14.27	14.73	14.56	17.90	17.70	14.20
28	13.19	13.81	15.55	10.83	14.97	16.85	14.29	14.80	14.59	17.90	16.15	13.10
29	10.80	13.67	15.68	18.20	14.97	16.54	14.21	14.87	14.63	20.80	15.72	14.00
30	9.10	13.66	15.71	13.55	---	17.50	14.21	14.36	14.67	19.04	15.51	13.30
31	9.00	---	15.70	11.74	---	15.20	---	14.24	---	20.04	15.30	---
MIN	7.81	8.27	11.84	9.22	9.23	14.47	12.22	11.20	14.24	13.44	15.30	13.10

WTR YEAR 1980 HWL 7.81 OCT 10 LWL 39.24 AUG 19

SOUTH-CENTRAL ALASKA

VALDEZ

610745146105001. Local number, CC00800531DACC1001 40342.
LOCATION.--Lat 61°07'45", long 146°10'50", Hydrologic Unit 19050003, 2 mi (3 km) east of Valdez airport.
Owner: The Alpetco Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused water-table test well, diameter 6 in (0.15 m), depth 76 ft (23.2 m), cased to 76 ft (23.2 m), grouted to about 30 ft (9.1 m), sediment in well to about 69 ft (21 m).
DATUM.--Altitude of land surface is 154.8 ft (47.18 m) National Geodetic Vertical Datum. Measuring point: Top of casing 4.00 ft (1.22 m) above land surface.
REMARKS.--Water levels below sediment level in well Feb. 24 to May 1.
PERIOD OF RECORD.--October 1979 to September 1980.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.19 ft (13.77 m) below land-surface datum, July 14, 1980; dry at about 69 ft (21 m) Feb. 24 to May 1, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	52.32	53.99	60.91	68.07			---	54.45	47.33	46.29	51.11
2	---	51.99	54.06	61.21	68.09			68.10	54.14	47.28	46.31	51.39
3	---	51.98	54.14	61.49	68.09			66.87	53.81	47.17	46.36	51.63
4	---	52.01	54.21	61.93	68.22			---	52.94	47.14	46.54	51.86
5	---	52.17	54.33	62.39	68.36			---	51.34	47.09	46.75	52.12
6	---	52.34	54.44	62.70	68.48			---	49.81	46.57	46.94	52.44
7	---	52.74	54.69	63.00	68.57			---	48.40	46.21	47.16	52.76
8	---	52.87	54.87	63.45	68.59			---	47.59	46.16	47.28	53.00
9	---	53.10	55.06	63.88	68.64			---	47.49	46.21	47.37	53.34
10	---	53.38	55.24	64.15	68.59			---	47.37	46.44	47.51	53.64
11	---	53.61	55.38	64.49	68.37			---	46.99	46.79	47.50	53.91
12	---	53.76	55.61	64.77	68.24			---	46.78	45.81	47.50	54.20
13	---	53.68	55.83	65.20	68.17			---	46.82	45.32	47.53	54.47
14	---	53.23	56.07	65.54	68.12			---	47.35	45.19	47.68	54.75
15	---	52.87	56.39	65.80	68.11			---	47.65	45.52	47.83	54.93
16	---	52.79	56.57	66.19	68.11			---	47.67	45.61	48.02	55.04
17	---	52.61	56.73	66.66	68.11			---	47.47	46.00	48.33	55.12
18	---	52.37	56.86	67.01	68.12			---	47.43	46.41	48.67	55.17
19	---	52.23	57.09	67.27	68.16			---	47.48	46.75	48.88	55.24
20	---	52.23	57.31	67.57	68.25			---	47.76	47.05	49.08	55.38
21	---	52.34	57.64	67.96	68.36			---	48.01	47.34	49.30	55.44
22	---	52.34	57.99	68.29	68.48			---	48.28	47.40	49.47	55.64
23	---	52.49	58.27	68.57	68.67			---	48.62	47.42	49.65	55.87
24	50.95	52.72	58.44	68.72	68.88			55.88	48.52	47.48	49.64	56.10
25	51.30	52.95	58.64	68.76	---			55.80	48.44	47.49	49.63	56.33
26	51.78	53.20	58.90	68.80	---			55.57	48.33	47.53	49.68	56.53
27	52.11	53.44	59.34	68.48	---			55.40	48.07	47.49	49.85	56.72
28	52.40	53.65	59.68	68.30	---			55.32	47.78	47.20	50.07	56.96
29	52.71	53.81	59.88	68.19	---			55.03	47.67	46.76	50.33	57.19
30	52.91	53.94	60.24	68.12	---			54.83	47.46	46.46	50.62	57.47
31	53.18	---	60.53	68.07	---			54.60	---	46.31	50.83	---
MIN		51.98	53.99	60.91					46.78	45.19	46.29	51.11

WTR YEAR 1980 HWL RECORDED 45.19 JUL 14 DRY FEB 24 TO MAY 1

SOUTH-CENTRAL ALASKA

VALDEZ

610645146105701. Local number, CC00900506CADA1001 40343.
LOCATION.--Lat 61°06'54", long 146°10'57", Hydrologic Unit 19050003, 2.2 mi (3.5 km) southeast of Valdez airport. Owner: The Alpetco Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused water-table test well, diamter 6 in (0.15 m), depth 85 ft (25.9 m), cased to 56 ft (17.1 m), grouted to about 30 ft (9.1 m). Well has caved below bottom of casing at 56 ft (17.1 m).
DATUM.--Altitude of land surface is 84.6 ft (25.79 m) National Geodetic Vertical Datum. Measuring point: Top of casing 4.5 ft (1.37 m) above land surface.
REMARKS.--No record June 26 to Aug. 26 because clock stopped.
PERIOD OF RECORD.--October 1979 to September 1980.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.58 ft (0.79 m) below land-surface datum, from recorded range in water levels, occurred sometime during period June 26 to Aug. 26, 1980; lowest recorded, 18.00 ft (5.49 m) below land-surface datum, Apr. 12, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3.56	4.25	7.10	10.78	12.79	17.53	9.73	4.45		---	4.39
2	---	3.82	4.35	7.28	10.91	12.95	17.66	9.11	4.42		---	4.42
3	---	3.97	4.45	7.48	11.01	13.10	17.76	8.48	4.32		---	4.49
4	---	4.11	4.50	7.72	11.22	13.27	17.87	7.88	4.05		---	4.58
5	---	4.21	4.49	7.92	11.33	13.44	---	7.36	3.83		---	4.66
6	---	4.28	4.50	8.14	10.96	13.61	---	6.89	3.64		---	4.73
7	---	4.35	4.50	8.36	10.80	13.77	---	6.30	3.53		---	4.82
8	---	4.37	4.50	8.58	10.78	13.92	---	5.90	3.51		---	4.86
9	---	4.40	4.53	8.80	10.78	14.07	---	5.53	3.53		---	4.90
10	---	4.20	4.57	9.02	10.78	14.24	---	5.26	3.62		---	4.95
11	---	3.74	4.62	9.25	10.86	14.39	---	5.05	3.57		---	5.01
12	---	3.74	4.72	9.46	10.90	14.54	17.99	4.88	3.57		---	5.08
13	---	3.72	4.83	9.68	10.93	14.72	17.90	4.74	3.62		---	5.00
14	---	3.72	4.87	9.91	10.98	14.87	17.82	4.64	3.71		---	4.77
15	---	3.93	4.98	10.12	---	15.03	17.77	4.45	3.76		---	4.67
16	---	3.60	5.09	10.36	---	15.19	17.72	4.45	3.78		---	4.67
17	---	3.71	5.20	10.58	---	15.34	17.64	4.56	3.65		---	4.70
18	---	3.99	5.29	10.81	11.20	15.51	17.58	4.50	3.65		---	4.83
19	---	4.13	5.41	10.99	11.30	15.67	17.55	4.50	3.67		---	4.94
20	---	4.18	5.51	11.20	11.40	15.81	17.46	4.55	3.77		---	5.04
21	---	4.30	5.62	11.36	11.49	15.96	17.15	4.57	3.82		---	5.13
22	---	4.25	5.73	8.23	11.62	16.11	16.91	4.67	3.88		---	5.20
23	---	4.25	5.83	8.23	11.79	16.27	16.75	4.71	3.90		---	5.28
24	4.08	4.27	5.92	9.00	11.92	16.41	16.60	4.73	3.88		---	5.35
25	4.08	4.35	6.00	9.61	12.04	16.54	16.43	4.71	3.87		---	5.41
26	4.14	4.40	6.12	9.98	12.19	16.68	16.12	4.67	---		---	5.50
27	4.24	4.49	6.26	10.21	12.32	16.83	15.42	4.66	---		---	5.55
28	4.30	4.48	6.40	10.38	12.47	16.98	14.73	4.66	---		4.33	5.59
29	4.33	4.21	6.58	10.49	12.59	17.11	12.30	4.62	---		4.35	5.66
30	3.48	4.20	6.76	10.59	---	17.27	10.48	4.50	---		4.41	5.77
31	3.41	---	6.90	10.68	---	17.38	---	4.47	---		4.39	---
MIN	3.41	3.56	4.25	7.10	10.78	12.79	10.48	4.45	3.51		4.33	4.39

WTR YEAR 1980 HWL 2.58 BETWEEN JUN 26 & AUG 26 LWL RECORDED 18.00 APR 12

SOUTH-CENTRAL ALASKA

SEWARD

600808149254802. Local number, SB00100134CADC2003 10782.
LOCATION.--Lat 60°07'52", long 149°25'56", Hydrologic Unit 1905003, at Fort Raymond Army recreation camp, near Seward. Owner: City of Seward.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused artesian test well, diameter 8 in (0.20 m), depth 141 ft (43.0 m), screen reportedly installed at bottom of well.
DATUM.--Altitude of land surface is 46 ft (14 m). Measuring point: Top of casing at land surface.
REMARKS.--Levels sometimes drawn down as much as 1.5 ft (0.5 m) by nearby pumping.
PERIOD OF RECORD.--July-August 1964, October 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.07 ft (3.98 m) below land-surface datum, Dec. 1, 1976; lowest, 27.72 ft (8.44 m) below land-surface datum, Apr. 14, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	17.26	22.66	20.70	21.28	22.74	20.62	20.53	21.10	21.97	22.41
2		17.53	17.23	22.71	20.66	21.45	21.93	20.62	20.50	21.10	21.89	22.41
3		17.28	17.44	22.75	21.01	21.61	21.43	20.47	20.56	21.23	21.88	22.44
4		17.20	17.66	22.78	21.25	21.80	21.65	20.39	20.63	21.30	21.83	22.50
5		17.25	18.04	22.94	20.64	22.07	21.47	20.33	20.60	21.97	21.74	22.56
6		17.46	18.53	23.02	19.88	22.07	21.35	20.26	21.11	21.99	21.65	22.63
7		17.72	18.90	23.09	19.25	22.15	21.31	20.24	20.87	21.93	21.61	22.63
8		17.99	19.21	23.12	---	22.15	21.29	20.23	20.28	21.37	21.55	22.69
9		18.23	19.49	23.15	---	22.22	20.66	20.90	20.12	21.36	21.57	22.75
10		18.45	19.61	23.14	---	22.27	21.32	21.00	20.03	21.86	21.66	22.65
11		17.77	19.88	23.13	---	22.34	21.47	21.10	19.95	21.32	21.38	22.64
12		16.32	20.08	23.13	---	22.44	21.69	20.38	19.95	21.23	21.62	22.76
13		15.63	20.27	23.24	---	22.50	21.90	20.35	19.97	21.30	21.83	22.77
14		15.53	21.08	23.17	16.93	22.63	21.66	20.32	20.10	21.20	22.45	22.75
15		15.61	21.22	23.26	17.21	22.70	21.58	20.33	20.24	21.29	22.29	22.74
16		15.55	21.75	23.36	18.08	23.58	21.59	20.62	20.39	21.17	22.16	22.63
17		15.49	21.99	23.31	18.11	22.94	21.62	21.05	20.54	21.80	21.55	22.60
18		15.60	21.47	22.91	19.02	23.11	21.60	20.31	20.76	21.88	21.53	22.56
19		15.88	21.53	22.38	19.04	23.18	21.73	19.69	20.87	22.28	22.21	22.59
20		16.25	21.55	20.81	19.75	23.25	21.80	18.99	20.91	22.40	21.71	22.68
21		16.85	21.66	20.73	19.85	23.22	21.78	18.85	20.92	22.59	22.35	22.75
22		17.22	21.88	22.96	20.30	23.17	21.08	18.89	20.94	21.89	22.42	22.77
23		17.84	21.93	24.57	20.87	23.14	20.55	18.91	20.98	21.86	22.51	22.80
24		18.39	22.03	24.47	20.78	23.13	20.85	19.04	21.08	22.23	22.56	22.78
25		18.84	22.46	23.96	20.74	23.12	20.57	19.72	21.08	22.20	22.10	22.79
26		19.20	22.26	23.84	20.70	23.13	20.46	19.93	21.14	21.95	22.99	22.74
27		19.60	22.25	23.34	20.91	23.10	20.46	19.72	21.70	22.57	22.97	22.51
28		19.76	22.47	22.53	21.03	23.08	20.57	20.29	21.19	22.52	23.02	22.25
29		18.80	22.58	22.14	21.16	23.07	20.57	20.50	21.13	22.20	22.38	22.05
30		17.69	23.05	21.61	---	23.06	20.60	20.13	21.10	22.12	22.90	21.98
31		---	22.67	21.05	---	22.95	---	20.79	---	22.06	22.92	---
MIN		15.49	17.23	20.73		21.28	20.46	18.85	19.95	21.10	21.38	21.98

WTR YEAR 1980 HWL RECORDED 15.49 NOV 17 LWL RECORDED 25.03 JAN 23 & 24

SOUTH-CENTRAL ALASKA

KENAI PENINSULA BOROUGH

594019151351201. Local number, SC00601412CAAB1001 11375.
LOCATION.--Lat 59°40'19", long 151°35'12", Hydrologic Unit 19050002, Pitzman Avenue on Diamond Ridge, Homer. Owner: Becky Fox-Krogstad.
AQUIFER.--Sandstone and conglomeration of the Tertiary System.
WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 in (0.15 m), depth 56 ft (15.8 m), cased to 47.5 ft (14.5 m), backfilled with gravel to 49 ft (14.9 m).
DATUM.--Altitude of land surface is 1,150 ft (350 m). Measuring point: Top of casing 2.00 ft (0.61 m) above land surface.
PERIOD OF RECORD.--June 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.57 ft (2.00 m) below land-surface datum, May 8, 1979; lowest measured, 11.68 ft (3.56 m) below land-surface datum, Mar. 20, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), JUNE TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 20	8.77	JUN 28	9.40	SEP 8	11.05

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	11.15	MAR 20	11.68	MAY 27	9.21	JUL 30	11.04	JUL 31	11.06	AUG 30	11.35
DEC 31	10.72	MAY 8	6.57	JUN 22	10.48						

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 9	10.69	JUN 18	9.17	JUN 19	10.40	JUN 21	9.35	JUL 4	9.88	JUL 6	10.46

594515151492201. Local number, SC00501510CCAC1001 10003.
LOCATION.--Lat 59°45'15", long 151°49'22", Hydrologic Unit 19050002, mile 161, Old Sterling Highway near Anchor Point. Owner: Raymond Williams.
AQUIFER.--Sand and gravel of the Quaternary or Tertiary System.
WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in (0.15 m), depth 100 ft (30.5 m), perforated liner 91 to 100 ft (27.7 to 30.5 m).
DATUM.--Altitude of land surface is 240 ft (73 m). Measuring point: Top of casing plate 4.80 ft (1.46 m) below land surface.
PERIOD OF RECORD.--May 1962 to September 1970, May 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.85 ft (10.93 m) below land-surface datum, May 31, 1963; lowest measured, 47.89 ft (14.60 m) below land-surface datum, June 20, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	37.82	MAR 26	37.42	MAY 2	36.13	JUL 14	36.29	AUG 20	36.79	SEP 30	36.28
JAN 10	37.26	APR 4	37.16	JUN 10	36.20						

602926151042201. Local number, SB00501029CDAC1001 10001.
LOCATION.--Lat 60°29'26", long 151°04'22", Hydrologic Unit 19050002, Mt. Redoubt Way, Soldotna. Owner: Charles S. Parker.
AQUIFER.--Gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.20 m), depth 100 ft (30.5 m), cased to 100 ft (30.5 m), perforated 81 to 97 ft (24.7 to 29.6 m).
DATUM.--Altitude of land surface is 94 ft (29 m). Measuring point: Shelter floor at top of casing 3.00 ft (0.91 m) above land surface.
PERIOD OF RECORD.--March 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.38 ft (0.73 m) below land-surface datum, June 28, 1963; lowest, 13.11 ft (4.00 m) below land-surface datum; occurred sometime between Feb. 15 and Apr. 15, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.41	6.20	6.32	6.71	---	7.21	7.07	5.94	6.65	6.04	6.71	6.43
10	7.70	5.29	6.58	6.46	---	7.43	6.90	6.22	6.44	6.18	5.84	6.57
15	5.75	7.87	6.89	---	---	7.11	6.70	7.04	6.07	6.39	6.39	6.04
20	5.65	6.30	6.65	---	---	7.24	6.56	6.14	6.49	6.34	6.26	6.38
25	6.19	6.16	6.75	---	---	7.33	6.10	6.06	6.13	6.88	5.87	6.14
EOM	6.40	6.25	6.89	---	7.61	7.49	6.42	5.86	6.04	6.44	6.16	5.74

WTR YEAR 1980 HWL 4.47 NOV 12 LWL RECORDED 11.21 FEB 28

SOUTH-CENTRAL ALASKA

KENAI PENINSULA BOROUGH--Continued

603846151002701. Local number, SB00601003ABAC1001 10646.
LOCATION.--Lat 60°38'46", long 151°00'27", Hydrologic Unit 19050002, Marathon Oil Well Road in Beaver Creek basin, Kenai area. Owner: Marathon Oil.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 65 ft (19.8 m), cased to 65 ft (19.8 m).
DATUM.--Altitude of land surface is 150 ft (46 m). Measuring point: Top of casing, 1.30 ft (0.40 m) above land surface.
REMARKS.--Levels unaffected by distant pumping.
PERIOD OF RECORD.--August 1968 to November 1973, April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.66 ft (2.64 m) below land-surface datum, Nov. 15 and 16, 1979; lowest, 14.26 ft (4.35 m) below land-surface datum, Apr. 4, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.55	9.88	9.31	---	9.93	10.31	9.81	9.49	9.54		---	10.03
10	10.39	9.08	9.51	10.17	10.06	10.35	9.33	9.56	9.63		---	10.14
15	10.14	8.66	9.60	10.30	10.05	10.38	9.24	9.63	9.72		9.96	9.72
20	10.17	8.80	9.80	10.00	10.07	10.47	9.46	9.67	---		9.87	9.75
25	10.21	9.09	9.88	9.98	10.19	10.50	9.55	9.76	---		9.99	9.62
EOM	9.95	9.14	10.15	9.91	10.25	10.50	---	9.48	---		9.92	9.51

WTR YEAR 1980 HWL 8.66 NOV 15 & 16 LWL RECORDED 10.59 OCT 5, MAR 28 & 29

604038151204303. Local number, SB00701223CCDB3008 10004.
LOCATION.--Lat 60°40'38", long 151°20'43", Hydrologic Unit 19050002, mile 1, Miller Loop Road, North Kenai. Owner: Collier Carbon and Chemical Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 112 ft (34.1 m), screened 106 to 110 ft (32.3 to 33.5 m).
DATUM.--Land surface is 129.7 ft (39.5 m) National Geodetic Vertical Datum. Measuring point: Top of casing 2.00 ft (0.61 m) above land surface.
REMARKS.--Large water-level fluctuations caused by nearby pumping. Well also known as Collier's 5B.
PERIOD OF RECORD.--December 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.52 ft (14.18 m) below land-surface datum, Feb. 7, 1968; lowest, 65.94 ft (20.10 m) below land-surface datum, June 16, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.13	---	58.50	58.05	58.25	58.32	57.49	58.28	58.30	57.89	58.47	58.64
2	57.54	---	58.85	57.99	57.99	57.75	58.37	58.05	58.43	57.79	58.30	58.88
3	57.54	---	58.72	58.03	58.05	58.09	57.80	58.10	57.93	57.63	58.56	58.86
4	58.34	---	58.89	58.29	57.46	58.01	58.04	58.40	58.07	57.92	58.81	58.64
5	59.45	---	59.07	58.10	58.00	58.15	58.26	58.22	58.28	58.30	58.94	58.46
6	60.53	---	59.06	58.84	58.33	57.88	57.85	58.67	58.28	57.85	58.80	58.39
7	60.76	---	59.69	58.50	58.24	58.20	57.95	58.34	58.26	57.68	58.45	58.21
8	60.00	---	59.20	58.37	57.87	58.15	57.78	58.66	57.81	57.93	58.14	58.18
9	60.96	---	58.65	59.23	58.24	57.99	57.03	58.18	58.31	57.65	58.37	58.15
10	60.84	---	58.39	58.53	58.49	58.29	57.10	58.10	57.45	57.56	58.30	57.98
11	59.82	---	59.11	58.41	58.10	58.05	57.24	58.51	57.86	57.66	58.63	57.97
12	59.94	---	58.93	58.44	58.23	58.07	57.52	58.64	57.94	57.29	58.59	57.96
13	59.70	---	58.92	58.72	58.06	58.15	58.41	58.52	57.24	57.25	58.59	57.99
14	60.36	---	58.96	58.51	58.10	58.17	58.63	58.27	56.46	57.76	58.46	57.55
15	59.92	---	58.99	58.44	58.02	57.97	58.53	58.41	56.24	57.66	58.50	57.52
16	60.23	---	58.74	58.52	57.83	58.09	58.05	58.11	56.23	57.65	58.60	57.65
17	59.92	---	58.69	58.85	58.22	58.12	58.04	58.38	56.53	57.44	58.60	57.72
18	59.96	---	58.71	58.85	57.82	58.51	58.35	58.47	56.64	57.57	58.24	57.73
19	60.10	---	58.85	58.75	58.34	58.33	57.63	58.12	56.13	57.61	58.30	58.19
20	58.99	---	59.31	59.34	57.78	58.05	58.45	58.45	55.92	57.59	58.53	58.06
21	59.18	---	59.59	58.80	56.97	58.25	58.63	58.21	57.65	57.48	58.32	58.06
22	59.79	---	58.13	58.55	56.95	57.95	58.58	57.88	57.94	57.35	58.30	57.74
23	59.76	---	58.75	58.77	58.09	58.32	58.57	58.34	58.23	57.21	58.72	57.24
24	59.10	---	58.05	58.34	58.16	58.52	58.74	58.39	58.47	57.10	58.77	56.10
25	59.06	---	58.30	58.33	58.33	58.59	58.47	58.33	58.52	58.00	58.45	56.60
26	59.50	---	57.95	58.71	58.07	58.49	58.58	58.47	58.59	57.87	58.66	56.61
27	59.75	---	58.15	58.71	58.03	58.37	58.59	58.71	57.93	57.95	58.59	56.20
28	59.43	58.68	58.21	58.84	57.88	58.25	59.07	58.24	58.12	58.12	58.69	55.01
29	59.70	58.06	57.07	58.95	58.16	58.44	58.43	57.49	57.71	58.47	58.77	56.03
30	60.20	58.06	58.28	58.55	---	58.53	58.33	57.86	57.62	58.63	58.57	56.75
31	60.43	---	58.05	58.25	---	58.25	---	58.07	---	58.42	58.71	---
MIN	57.13		57.07	57.99	56.95	57.75	57.03	57.49	55.92	57.10	58.14	55.01

WTR YEAR 1980 HWL 55.01 SEP 28 LWL RECORDED 61.25 OCT 11

604133151214803. Local number, SB00701215DCBC3004 11216.
LOCATION.--Lat 60°41'33", long 151°21'48", Hydrologic Unit 19050002, Bernice Lake campground, North Kenai. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled water-table test well, diameter 6 in (0.15 m), depth 52.4 ft (16.0 m), cased to 52.4 ft (16.0 m).
DATUM.--Land surface is 84.6 ft (25.8 m) National Geodetic Vertical Datum. Measuring point: Top of casing 2.00 ft (0.61 m) above land surface.
REMARKS.--Well is 4 ft (1.2 m) east of well 10941.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.91 ft (2.41 m) below land-surface datum, June 18, 1980; lowest, 13.38 ft (4.08 m) below land-surface datum, Oct. 7, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.67	10.83	8.77									
10	11.49	9.84	8.74									
15	11.13	9.27	8.72									
20	11.11	9.04	8.69									
25	11.12	8.92	8.68									
EOM	10.97	8.85	---									

WTR YEAR 1980 HWL MEASURED 7.91 JUN 18 LWL RECORDED 11.76 OCT 1
NOTE.--Additional water levels were measured at 8.12 ft on May 5, 7.91 ft on June 18, and 8.02 ft on Aug. 11.

604133151214802. Local number, SB00701215DCBC2004 10941.
LOCATION.--Lat 60°41'33", long 151°21'48", Hydrologic Unit 19050002, Bernice Lake campground, North Kenai. Owner: State of Alaska.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled artesian test well, diameter 6 in (0.15 m), depth 202 ft (61.6 m), cased to 191 ft (58.2 m), screened 191 to 196 ft (58.2 to 59.7 m).
DATUM.--Land surface is 84.6 ft (25.8 m) National Geodetic Vertical Datum. Measuring point: Top of casing 2.00 ft (0.61 m) above land surface.
PERIOD OF RECORD.--June 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.40 ft (2.56 m) below land-surface datum, Jun 12, 1980; lowest, 14.08 ft (4.29 m) below land-surface datum, Sept. 10, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.29	11.46	9.39	9.40	9.24	9.30	9.38	8.82	8.64	8.66	8.74	8.79
10	12.15	10.56	9.35	9.37	9.30	9.33	9.32	8.78	8.45	8.67	8.70	8.86
15	11.77	9.96	9.35	9.31	9.14	9.32	9.30	8.74	8.48	8.59	8.70	8.64
20	11.74	9.70	9.31	9.40	9.11	9.31	9.20	8.75	8.67	8.65	8.74	8.69
25	11.74	9.59	9.30	9.36	9.20	9.38	9.10	8.76	8.65	8.59	8.80	8.64
EOM	11.61	9.45	9.46	9.24	9.25	9.49	8.93	8.61	8.65	8.69	8.72	8.61

WTR YEAR 1980 HWL 8.40 JUN 12 LWL 12.42 OCT 1

SOUTH-CENTRAL ALASKA

KENAI PENINSULA BOROUGH--Continued

610647151153001. Local number, SB01201120DBDD1001 21426.
LOCATION.--Lat 61°06'47", long 151°15'30", Hydrologic Unit 19050002, 4 mi (6 km) northwest of Tyonek.
Owner: U.S. Geological Survey.
AQUIFER.--Claystone and coal of the Tertiary System.
WELL CHARACTERISTICS.--Drilled artesian observation well, hole diameter 6 in (0.15 m) to 83 ft (25.3 m) and 4 in (0.10 m) diameter to 320 ft (97.5 m); 6 in (0.15 m) steel casing to 43 ft (13.1 m), 4 in (0.10 m) plastic pipe to 206 ft (62.8 m), pre-perforated 106 to 206 ft (32.3 m to 62.8 m), clay plug in pipe 194 to 206 ft (59.2 m to 62.8 m).
DATUM.--Altitude of land surface is 210 ft (64 m). Measuring point: Top of 4 in (0.10 m) plastic pipe 2.50 ft (0.76 m) above land surface.
PERIOD OF RECORD.--December 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.06 (6.11 m) below land-surface datum, Apr. 27, 1978; lowest, 32.44 ft (9.89 m) below land-surface datum, July 30 and 31, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.69	25.07	27.68	---	27.68	27.55	28.78	24.02	25.63	23.97	31.00	24.66
2	23.23	24.32	27.89	---	27.57	27.56	28.78	24.32	25.56	24.57	30.11	23.86
3	23.26	24.20	27.93	---	27.57	27.58	28.77	25.02	25.64	25.09	29.41	23.72
4	23.49	24.23	27.93	---	27.58	27.58	28.51	25.51	25.94	25.43	29.25	23.72
5	23.58	24.35	28.30	---	27.58	27.58	28.01	25.61	26.52	26.11	29.47	23.99
6	23.52	24.49	28.72	---	27.46	27.63	27.54	25.95	26.95	26.36	29.22	24.51
7	23.24	24.56	28.63	---	27.46	27.56	27.36	26.39	27.42	26.52	29.07	24.84
8	22.81	24.06	28.63	---	27.68	27.56	27.31	26.30	28.03	26.55	28.35	25.37
9	22.81	24.03	29.03	---	27.57	27.67	27.43	26.42	28.29	26.90	28.20	25.56
10	22.94	24.25	29.07	---	27.57	27.74	27.60	26.59	28.58	27.13	28.40	25.59
11	22.83	22.09	28.49	---	27.57	27.75	25.76	27.03	28.85	27.36	28.90	25.86
12	22.65	20.91	28.34	---	27.47	27.78	25.53	27.54	29.24	27.62	28.86	25.85
13	22.60	20.83	28.34	---	27.29	27.84	25.50	28.01	29.55	27.47	26.76	25.86
14	22.61	20.90	28.40	29.29	27.16	27.86	25.59	28.23	29.87	26.95	26.03	25.81
15	22.65	21.59	28.73	29.28	27.01	27.86	25.91	28.81	29.77	26.95	25.94	25.11
16	22.74	22.22	28.70	29.24	26.93	27.96	26.01	29.35	29.68	27.14	26.06	24.12
17	22.94	22.87	28.72	29.15	26.89	28.01	26.52	28.83	29.76	27.37	26.51	23.92
18	23.29	23.63	28.29	29.06	26.89	28.04	26.96	28.83	30.32	27.76	26.99	23.92
19	23.69	23.68	27.89	29.01	26.89	28.17	27.35	29.03	30.89	28.11	27.33	24.18
20	24.13	24.31	27.85	29.01	27.09	28.11	27.63	29.43	29.53	28.50	24.49	24.65
21	24.53	24.79	27.24	28.85	27.37	28.12	27.68	29.74	29.53	28.69	24.04	25.06
22	24.86	24.84	27.05	28.63	27.61	28.25	25.41	30.25	29.32	28.07	24.03	25.43
23	24.95	25.46	26.99	28.72	27.64	28.30	23.93	30.85	29.34	28.13	24.20	25.72
24	25.26	25.88	29.29	28.76	27.70	28.25	23.40	30.97	29.90	27.42	24.58	25.26
25	25.50	25.99	29.55	28.66	27.59	28.24	23.25	31.18	29.95	27.44	25.16	25.22
26	25.62	26.04	28.76	28.66	27.41	28.24	23.25	31.60	26.35	26.98	25.41	25.23
27	25.93	26.64	28.05	28.42	27.40	28.34	23.15	27.06	24.66	26.43	25.82	25.35
28	26.49	26.84	27.35	28.31	27.41	28.43	23.17	26.47	23.92	26.10	26.28	24.62
29	25.93	27.22	27.10	28.16	27.51	28.63	23.39	26.17	23.79	30.62	26.77	24.62
30	25.44	27.39	26.99	27.90	---	28.62	23.68	26.11	23.79	32.15	26.87	24.81
31	25.43	---	---	27.70	---	28.73	---	26.22	---	31.96	27.03	---
MIN	22.60	20.83	26.99		26.89	27.55	23.15	24.02	23.79	23.97	24.03	23.72

WTR YEAR 1980 HWL 20.83 NOV 13 LWL 32.44 JUL 30 & 31

MUNICIPALITY OF ANCHORAGE

611049149545101. Local number, SB01300436BAAC1041 02368.
LOCATION.--Lat 61°10'49", long 149°54'51", Hydrologic Unit 19050002, Harding Drive and 45th Street, Anchorage.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (0.15 m), depth 18.5 ft (5.6 m), screened 13.5 to 18.5 ft (4.1 to 5.6 m).
DATUM.--Altitude of land surface is 88 ft (26.8 m). Measuring point: Top of casing cap 2.50 ft (0.76 m) above land surface.
PERIOD OF RECORD.--June 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.85 ft (3.61 m) below land-surface datum, Aug. 21, 1980; lowest measured, 13.52 ft (4.12 m) below land-surface datum, Sept. 23, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	12.22	DEC 19	12.02	FEB 22	12.59	APR 21	12.08	JUN 18	12.36	AUG 21	11.85
NOV 19	11.89	JAN 22	12.39	MAR 20	12.74	MAY 20	12.29	JUL 21	12.17	SEP 22	11.94

SOUTH-CENTRAL ALASKA

MUNICIPALITY OF ANCHORAGE--Continued

611149149553901. Local number, SB01300423DDDB1002 00280.
LOCATION.--Lat 61°11'49", long 149°55'39", Hydrologic Unit 19050002, West Northern Lights Boulevard and Lahonda Drive, Anchorage. Owner: Municipality of Anchorage.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 283 ft (86.3 m), screened 278 to 283 ft (84.7 to 86.3 m).
DATUM.--Altitude of land surface is 47 ft (14 m). Measuring point: Top of casing 1.30 ft (0.40 m) above land surface.
REMARKS.--Water level affected by pumping in the Anchorage area. Tide effect in well is about 0.2 ft (.06 m).
PERIOD OF RECORD.--September 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing over top of casing, 1962 to 1963; lowest, 13.02 ft (3.97 m) below land-surface datum, Apr. 2, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.77	4.41	8.13	8.67	8.43	8.99	4.84	5.52	9.37	10.20	5.54	5.34
10	5.60	8.31	8.52	8.93	8.69	9.04	4.97	5.56	10.29	9.33	5.44	5.28
15	5.64	8.31	8.79	8.67	8.86	8.75	5.05	5.71	10.19	5.89	5.41	5.30
20	5.21	8.56	8.53	8.54	8.55	8.03	5.03	5.64	9.47	5.61	5.44	4.89
25	4.55	8.65	8.27	8.85	8.94	4.61	5.62	5.76	10.24	5.54	5.37	4.71
EOM	4.44	8.34	8.95	8.35	9.11	5.13	5.31	5.41	10.36	5.30	5.01	4.39

WTR YEAR 1980 HWL 3.41 NOV 6 LWL 10.69 JUN 30

611311149510401. Local number, SB01300317BDAD1003 00114.
LOCATION.--Lat 61°13'11", long 149°51'04", Hydrologic Unit 19050002, 3rd and Concrete Avenues, Anchorage. Owner: Municipality of Anchorage.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled artesian test well, diameter 8 in (0.20 m), depth 230 ft (70.1 m), slotted 162 to 182 ft (49.4 to 55.5 m) and 190 to 201 ft (57.9 to 61.3 m).
DATUM.--Land surface is 129.3 ft (39.4 m) National Geodetic Vertical Datum. Measuring point: Top of coupling on casing cap 2.66 ft (0.81 m) above land surface.
REMARKS.--Water-level fluctuation caused mainly by pumping of local municipal wells. Datum was established prior to the 1964 earthquake; no adjustments have been determined.
PERIOD OF RECORD.--October 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.88 ft (8.80 m) below land-surface datum, Nov. 29, 1957; lowest measured, 128.17 (39.07 m) below land-surface datum, Apr. 19, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	50.41	DEC 19	46.68	FEB 21	46.06	APR 21	45.98	JUN 18	47.55	AUG 21	45.84
NOV 19	46.48	JAN 22	46.00	MAR 20	46.11	MAY 20	46.42	JUL 21	47.88	SEP 22	45.33

611336149454401. Local number, SB01300311CDAD1003 00067.
LOCATION.--Lat 61°13'36", long 149°45'44", Hydrologic Unit 19050002, near Glenn Highway and Boniface Parkway, Anchorage. Owner: U.S. Air Force.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 187 ft (57.0 m), cased to 187 ft (57.0 m).
DATUM.--Altitude of land surface is 210 ft (64 m). Measuring point: Top of casing 3.90 ft (1.19 m) above land surface.
REMARKS.--Water levels affected by pumping in the Anchorage area.
PERIOD OF RECORD.--September 1959 to October 1962, September 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.88 ft (4.54 m) below land-surface datum, Oct. 28, 1960; lowest, 34.77 ft (10.60 m) below land-surface datum, May 14 and 18, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.86	---	23.27	---	24.15	25.19	26.12	24.75	24.56	22.97	21.35	20.20
10	23.91	---	25.69	---	24.29	25.58	26.08	24.85	---	22.85	20.90	20.29
15	23.88	24.18	24.89	---	24.30	25.16	25.49	25.17	---	22.35	20.30	20.01
20	24.41	24.07	23.81	---	24.28	25.45	25.32	24.79	23.82	22.23	20.31	20.08
25	24.42	23.80	23.95	24.50	27.00	25.40	25.45	24.77	23.50	22.31	20.40	19.62
EOM	---	23.29	24.30	23.91	25.11	25.79	25.40	24.61	23.25	21.40	19.99	19.37

WTR YEAR 1980 HWL 19.28 SEP 29 LWL 27.80 APR 3

SOUTH-CENTRAL ALASKA

MUNICIPALITY OF ANCHORAGE--Continued

611444149415401. Local number, SB01300206DBBA1004 00017.
LOCATION.--Lat 61°14'44", long 149°41'54", Hydrologic Unit 19050002, Arctic Valley Road, Fort Richardson. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled artesian test well, diameter 6 in (0.15 m), depth 670 ft (204 m), cased to 134 ft (40.8 m), backfilled with gravel to 134 ft (40.8 m) and plugged, perforated 90 to 120 ft (27.4 to 36.6 m) and 130 to 134 ft (39.6 to 40.8 m).
DATUM.--Altitude of land surface is 294 ft (90 m). Measuring point: Top of shelter floor 1.95 ft (0.59 m) above land surface.
REMARKS.--Water levels affected by pumping in the Anchorage area.
PERIOD OF RECORD.--August 1954 to June 1962, September 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.15 ft (12.85 m) below land-surface datum, Oct. 28, 1960; lowest, 66.49 ft (20.27 m) below land-surface datum, May 15, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.43	---	52.77	---	51.66	53.34	54.34	54.56	54.65	52.08	50.37	48.55
10	52.74	53.83	53.70	---	51.89	53.28	54.72	54.72	54.85	51.89	49.95	48.85
15	52.68	53.33	---	---	52.08	53.30	54.53	54.96	54.10	51.50	49.26	48.45
20	53.16	53.57	52.74	---	51.85	53.71	54.37	54.80	53.40	51.25	49.41	48.56
25	53.32	53.35	52.48	52.83	53.52	53.70	54.52	55.07	52.94	51.33	49.12	48.07
EOM	---	52.90	---	51.31	53.28	54.44	54.77	54.88	52.61	50.45	48.47	47.68

WTR YEAR 1980 HWL 47.47 SEP 28 & 29 LWL 55.35 MAY 14

MATANUSKA-SUSITNA BOROUGH

613417149065401. Local number, SA01700209CCCB1009 20004.
LOCATION.--Lat 61°34'20", long 149°06'50", Hydrologic Unit 19050002, Springer Road, 2 mi (3 km) south of Palmer. Owner: Glenn Woods.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.10 m), depth 83 ft (25.3 m), cased to 82 ft (25.0 m), slotted at bottom.
DATUM.--Altitude of land surface is 170 ft (52 m). Measuring point: Top of casing 0.50 ft (0.15 m) above land surface.
PERIOD OF RECORD.--July 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.58 ft (21.21 m) below land-surface datum, July 29, 1964; lowest measured, 77.36 ft (23.58 m) below land-surface datum, Mar. 26, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 23	73.13	FEB 25	71.97	APR 24	72.76	JUN 25	72.17	SEP 3	71.15	SEP 25	71.04
JAN 24	72.26	MAR 24	72.46	MAY 22	73.62	JUL 28	70.99				

613403149151001. Local number, SA01700115BDAB1003 20011.
LOCATION.--Lat 61°34'03", long 149°15'10", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment Station, 5 mi (8 km) southwest of Palmer. Owner: University of Alaska.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Dug unused water-table well, depth 40 ft (12.2 m), diameter unknown.
DATUM.--Altitude of land surface is 173 ft (52.7 m). Measuring point: Top of wooden well cover 1.00 ft (0.30 m) above land surface.
REMARKS.--Water-level records prior to 1980 water year are available in files of Anchorage subdistrict office and from Ground Water Site Inventory computer file.
PERIOD OF RECORD.--December 1955 to August 1974, March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.61 ft (7.81 m) below land-surface datum, July 10, 1956; lowest measured, 29.75 ft (9.07 m) below land-surface datum, Feb. 5, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 23	27.05	JAN 24	26.38	MAR 24	26.80	MAY 22	26.69	JUL 28	26.79	SEP 25	26.77
DEC 19	26.92	FEB 25	26.69	APR 24	26.72	JUN 25	26.80	SEP 3	26.81		

SOUTH-CENTRAL ALASKA

MATANUSKA-SUSITNA BOROUGH--Continued

613406149152103. Local number, SA01700115BACD3004 20013.
LOCATION.--Lat 61°34'06", long 149°15'21", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment station, 5 mi (8 km) southwest of Palmer. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (0.15 m), depth 313 ft (95.4 m), cased to 313 ft (95.4 m).
DATUM.--Altitude of land surface is 172 ft (52.4 m). Measuring point: Top of casing 3.50 ft (1.07 m) above land surface.
REMARKS.--Water-level records prior to 1980 water year are available in files of Anchorage subdistrict office. Water levels are available also from Ground Water Site Inventory computer file prior to August 1974 and from WATSTORE computer file after February 1977. Water-quality analyses for 1963 and 1967 are available from WATSTORE computer file and subdistrict files.
PERIOD OF RECORD.--September 1955 to August 1974, February 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.42 ft (1.65 m) below land-surface datum, June 28, 1962; lowest measured, 31.50 ft (9.60 m) below land-surface datum, Apr. 1, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.58				---	14.30	14.12	14.19	14.30	13.97		13.76
10	14.77				14.30	14.30	14.38	14.10	14.29	14.02		13.99
15	14.83				14.43	14.15	14.26	14.21	14.22	14.05		13.61
20	14.90				14.08	14.21	14.16	14.06	14.12	14.20		13.49
25	14.81				14.31	14.06	14.19	14.14	14.12	14.20		13.36
EOM	---				14.31	14.31	13.98	14.21	13.91	---		13.17

WTR YEAR 1980 HWL 13.17 SEP 30 LWL RECORDED 16.89 OCT 7

613406149152102. Local number, SA01700115BACD2004 20014.
LOCATION.--Lat 61°34'06" long 149°15'21", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment Station, 5 mi (8 km) southwest of Palmer. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled artesian observation well, depth 259 ft (78.9 m); 8-in (0.20-m) casing to 34.4 ft (10.5 m), slotted at 30 ft (9.1 m); 6-in (0.15-m) casing to 49 ft (14.9 m), slotted 36 to 39 ft (11.0 to 11.9 m) and 42 to 45 ft (12.8 to 13.7 m); 4-in (0.10-m) casing from 29 ft (8.8 m) to unknown depth, perforated 155.5 to 156.5 ft (47.4 to 47.7 m).
DATUM.--Altitude of land surface is 172 ft (52.4 m). Measuring point: Top of 8-in (0.20-m) casing 3.50 ft (1.07 m) above land surface.
REMARKS.--Water-level records prior to 1980 water year are available in files of Anchorage subdistrict office and from Ground Water Site Inventory computer file. Water-quality analyses for 1955 and 1967 are available from WATSTORE computer file and in subdistrict files.
PERIOD OF RECORD.--September 1955 to August 1974, February 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing over top of casing, Aug. 1962 to Mar. 1964; lowest measured, 2.33 ft (0.71 m) below land-surface datum, July 26, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 23	2.14	JAN 24	2.27	MAR 24	1.76	MAY 22	1.99	JUL 28	1.89	SEP 25	1.95
DEC 19	2.00	FEB 25	2.03	APR 24	2.01	JUN 25	1.85	SEP 3	1.77		

614147150013801. Local number, S[illegible]1900432ADBD1001 21100.
LOCATION.--Lat 61°41'47", long 150°01'38", Hydrologic Unit 19050002, northwest corner of Nancy Lake Recreation maintenance facility, 3 mi (5 km) south of Willow. Owner: State of Alaska.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled institution water-table well, diameter 6 in (0.15 m), depth 69 ft (21.0 m), screened from 64 to 69 ft (19.5 to 21.0 m).
DATUM.--Altitude of land surface is 260 ft (79 m). Measuring point: Top of casing 1 ft (0.30 m) above land surface.
REMARKS.--Water-level records prior to 1980 water year are available in files of Anchorage subdistrict office and from Ground Water Site Inventory computer file.
PERIOD OF RECORD.--March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.96 ft (14.31 m) below land-surface datum, Sept. 30, 1980; lowest measured, 50.54 ft (15.40 m) below land-surface datum, Apr. 4, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16	47.92	MAY 23	47.63	AUG 6	47.04	SEP 30	46.96
JAN 31	47.14	JUL 14	47.20	SEP 9	47.06		

YUKON ALASKA

FORT GREELY

635947145435101. Local number, FD01101011BDAA1003 50007.
LOCATION.--Lat 63°58'47", long 145°43'51", Hydrologic Unit 19030004, at Fort Greely about 1,500 ft (460 m) west of West Third Street and East Post Road intersection. Owner: U.S. Army.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), original depth 230 ft (70 m), top of sediment in well about 217 ft (66 m), casing information not available.
DATUM.--Altitude of land-surface datum is 1,300 ft (400 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
REMARKS.--Water level reflects changes in the Delta River 1.8 mi (1.15 km) to the west.
PERIOD OF RECORD.--November 1965 to September 1975, August 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 181.77 ft (55.40 m) below land-surface datum, Sept. 28 and 29, 1980; lowest, dry at 216.7 ft (66.0 m) at various times.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	182.92	---	187.94		---	199.69	202.58	204.53	204.35	198.87		---
10	---	---	188.40		196.95	200.18	203.04	204.74	203.80	---		---
15	---	---	---		197.68	200.74	203.37	204.94	203.14	---		---
20	---	---	---		198.15	201.13	203.74	204.96	202.12	---		---
25	---	186.90	---		198.75	201.74	204.08	204.95	201.16	---		181.92
EOM	---	187.39	---		199.23	202.17	204.30	204.72	200.11	---		181.94

WTR YEAR 1980 HWL RECORDED 181.77 SEP 28&29 LWL RECORDED 205.08 MAY 22

FAIRBANKS NORTH STAR BOROUGH

643916147043501. Local number, FD00300314ADCC1001 50004.
LOCATION.--Lat 64°39'11", long 147°04'35", Hydrologic Unit 19030004, building 4355, Eielson Air Force Base. Owner: U.S. Air Force.
AQUIFER.--Sand and gravel of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 101 ft (30.8 m), casing information not available.
DATUM.--Altitude of land-surface datum is 540 ft (165 m). Measuring point: Top of metal plate 1.00 ft (0.30 m) above land-surface datum.
PERIOD OF RECORD.--August 1965 to July 1975, April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.87 ft (2.09 m) below land-surface datum, July 27, 1967; lowest, 9.90 ft (3.02 m) below land-surface datum, Nov. 11, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.32	9.60	9.54	9.21	8.30	8.02	8.19	8.94	9.54	9.14	9.15	9.10
10	9.37	9.66	9.50	9.08	8.23	8.04	8.29	9.04	9.50	9.06	9.21	9.19
15	9.42	9.66	9.49	8.93	8.18	8.05	8.49	9.13	9.49	9.01	9.22	9.22
20	9.47	9.65	9.44	8.76	8.08	8.08	8.60	9.23	9.09	9.00	8.96	9.21
25	9.51	9.63	9.34	8.64	8.04	8.13	8.68	9.33	9.10	9.11	8.99	9.22
EOM	9.56	9.59	9.30	8.42	8.03	8.23	8.77	9.45	9.12	9.06	9.07	9.24

WTR YEAR 1980 HWL 8.02 MAR 2-5&7-8 LWL 9.67 NOV 18&21-23

644400147151501. Local number, FD00200224ABBB1 51659.
LOCATION.--Lat 64°44'00", long 147°15'15", Hydrologic Unit 19030004, 50 ft (15 m) from southeast corner, junction of Laurence Road and Nelson Road near North Pole. Owner: U.S. Army Corps of Engineers.
AQUIFER.--Sand and gravel of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.10 m), depth 30 ft (9.14 m), cased to 30 ft (9.14 m).
DATUM.--Land-surface datum is 503.5 ft (153.5 m) National Geodetic Vertical Datum. Measuring point: top of casing 2.97 ft (0.91 m) above land-surface datum.
REMARKS.--U.S. Army Corps of Engineers named well P-251.
PERIOD OF RECORD.--June 1976 to May 1980 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.99 ft (3.35 m) below land-surface datum, Aug. 14-16, 1979; lowest, 13.65 ft (4.16 m) below land-surface datum, Apr. 14, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1979 TO MAY 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.87	12.53	12.54	12.41	12.36	12.43	12.39	12.50				
10	11.97	12.59	12.52	12.38	12.38	12.44	12.39	12.53				
15	12.08	12.63	12.50	12.38	12.38	12.44	12.40	12.58				
20	12.18	12.69	12.48	12.37	12.38	12.43	12.40	12.60				
25	12.21	12.71	12.45	12.37	12.39	12.44	12.41	12.62				
EOM	12.21	12.63	12.43	12.36	12.41	12.43	12.43	12.65				

OCT 1979 TO MAY 1980 HWL 11.77 OCT 1 LWL 12.71 NOV 21-27

YUKON ALASKA

FAIRBANKS NORTH-STAR BOROUGH--Continued

644528147131201. Local number, FD00200307ADBD1 51660.

LOCATION.--Lat 64°45'28", long 147°13'12"; Hydrologic Unit 19030004, 2 mi (3 km) northeast of intersection of Laurence Road and Nelson Road, near North Pole. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Sand and gravel of Quarternary age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.10 m), depth 31 ft (9.45 m), cased to 31 ft (9.45 m).

DATUM.--Land-surface datum is 494.2 ft (150.6 m) National Geodetic Vertical Datum. Measuring point: top of casing 2.91 ft (0.887 m) above land-surface datum.

REMARKS.--U.S. Army Corps of Engineers named well P-252.

PERIOD OF RECORD.--June 1976 to May 1980 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest measured water level, 9.59 ft (2.92 m) below land-surface datum, July 3 & 4, 1977; lowest, 13.04 ft (3.97 m) below land-surface datum, Oct. 1, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), OCTOBER 1979 TO MAY 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.40	11.89	11.49	11.33	11.24	11.36	11.43	11.34				
10	12.38	11.83	11.47	11.28	11.29	11.38	11.43	11.29				
15	12.31	11.73	11.44	11.27	11.30	11.39	11.42	11.25				
20	12.23	11.68	11.41	11.27	11.30	11.40	11.39	11.20				
25	12.10	11.63	11.39	11.27	11.31	11.41	11.37	11.14				
EOM	11.97	11.54	11.35	11.27	11.33	11.41	11.35	11.10				

OCT 1979 TO MAY 1980 HWL 11.10 MAY 31 LWL 12.40 OCT 5-8

644944147402501. Local number, FC00100113BCCC1022 50006.

LOCATION.--Lat 64°49'44", long 147°40'25", Hydrologic Unit 19030004, at former building site 4005, Fort Wainwright. Owner: U.S. Army.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 118 ft (36.0 m), cased to 100 ft (30.5 m).

DATUM.--Altitude of land-surface datum is 440 ft (134 m). Measuring point: Top of casing 1.50 ft (0.46 m) above land-surface datum.

REMARKS.--Water level reflects seasonal changes in the Chena River 0.4 mi (0.6 km) to the north and the Tanana River 2.5 mi (4.0 km) to the south.

PERIOD OF RECORD.--August 1966 to June 1970, March 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.67 ft (1.12 m) above land-surface datum, Aug. 15, 1967, due to flooding; lowest water level measured, 16.60 ft (5.06 m) below land-surface datum, Mar. 20, 1965.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.68	14.47	14.71	14.83	14.92	15.05	15.17	14.88	14.69	14.09	14.07	13.42
10	13.74	14.60	14.74	14.83	14.94	15.07	15.19	14.67	14.70	14.07	14.01	13.43
15	13.82	14.62	14.76	14.85	14.96	15.09	15.21	14.62	14.72	13.97	13.94	13.50
20	13.96	14.65	14.78	14.87	14.99	15.11	15.23	14.63	14.72	13.99	13.73	13.52
25	14.04	14.68	14.79	14.89	15.01	15.13	15.24	14.64	14.61	14.03	13.52	13.53
EOM	14.31	14.70	14.82	14.91	15.03	15.15	15.09	14.67	14.55	14.08	13.52	13.55

WTR YEAR 1980 HWL 13.42 SEP 5-9 LWL 15.24 APR 22-25

645429147383901. Local number, FB00100113DDDC1003 50172.

LOCATION.--Lat 64°54'29", long 147°38'39", Hydrologic Unit 19030004, Lot 5, Block A, McGrath Estates Subdivision. Owner: McGrath Estates Incorporated.

AQUIFER.--Alluvium of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in (0.10 m), depth 124.5 (38 m), casing information not available.

DATUM.--Altitude of land-surface datum is 710 ft (216 m). Measuring point: Top of casing 4.25 ft (1.29 m) above land-surface datum.

REMARKS.--Approximately 8.5 ft (2.6 m) of oil in casing (no corrections have been applied). Recorder placed on well June 1980. All values after May 1980 are highest daily water levels.

PERIOD OF RECORD.--December 1949 to June 1956, February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, flowing over top of casing June 9-11, 1950; lowest measured, 3.71 ft (1.13 m) below land-surface datum, Mar. 29, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 2	2.48	MAR 29	3.71	JUN 25	3.31	JUL 15	3.31	AUG 25	3.27	SEP 15	3.29
DEC 1	2.53	MAY 8	3.43	JUN 30	3.32	JUL 20	3.31	AUG 31	3.23	SEP 20	3.24
DEC 31	2 25	JUN 10	3.49	JUL 5	3.31	JUL 25	3.31	SEP 5	3.24	SEP 25	3.27
JAN 25	3.25	JUN 18	3.32	JUL 10	3.31	AUG 20	3.37	SEP 10	3.26	SEP 30	3.24
FEB 25	3.53	JUN 20	3.31								

YUKON ALASKA

FAIRBANKS NORTH-STAR BOROUGH--Continued

645442147461601. Local number, FB00100117DDAD1001 50176.

LOCATION.--Lat 64°54'38", long 147°46'45"; Hydrologic Unit 19030004, 1.4 mi (2.3 km) northwest of intersection of Farmers Loop Road and Grenac Road, near Fairbanks. Owner: U.S. Geological Survey.

AQUIFER.--Birch Creek schist of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 565 ft (172.2 m), cased to 370 ft (112.8 m).

DATUM.--Land-surface datum is 1,282.92 ft (391.034 m) National Geodetic Vertical Datum (datum established by Corps of Engineers in 1958). Measuring point: Top of casing 1.98 ft (0.60 m) above land-surface datum.

REMARKS.--U.S. Army named well B-61. Water levels prior to this year have been published in feet National Geodetic Vertical Datum. Subtract the prior published levels at NGVD from the land-surface datum of 1,282.92 ft NGVD to convert these levels to feet below land-surface datum.

PERIOD OF RECORD.--May 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 473.53 ft (144.32 m) below land-surface datum, May 28, 1975; lowest, 493.41 ft (150.38 m) below land-surface datum, Sept. 23 and 24, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	490.28	490.59	491.00	492.64	492.19	491.31	492.27	---	---	492.68	---	493.26
10	490.26	490.61	492.73	492.01	492.98	491.01	492.46	492.32	---	492.77	---	493.37
15	490.56	490.33	---	491.97	492.00	491.31	492.43	492.40	492.71	492.86	---	493.30
20	490.55	490.48	491.86	492.23	491.99	491.99	492.36	492.29	492.45	492.83	493.28	493.34
25	490.46	490.86	491.99	492.71	491.76	492.55	492.52	492.44	492.69	492.90	493.22	493.30
EOM	490.57	490.88	492.29	492.22	491.56	492.27	---	492.40	492.66	492.93	493.09	493.36

WTR YEAR 1980 HWL 490.11 OCT 9 LWL 493.41 SEP 23&24

MCKINLEY PARK

634355148550501. Local number, FC01400704BDAB1002 50002.

LOCATION.--Lat 63°43'55", long 148°55'05", Hydrologic Unit 19030004, near McKinley Park Hotel. Owner: U.S. National Park Service.

AQUIFER.--Fractured schist of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 307 ft (93.6 m) cased to 304 ft (92.7 m), perforated 150 to 199.5 ft (45.7 to 60.8 m).

DATUM.--Altitude of land surface is 1,750 ft (533 m). Measuring point: Top of casing 2.50 ft (0.76 m) above land surface.

REMARKS.--Thirty-seven measurements were made by the National Park Service. Measurements on June 23, July 21, and Sept. 30 were made by the Geological Survey.

PERIOD OF RECORD.--1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.26 ft (27.21 m) below land-surface datum, Oct. 4, 1969; lowest measured, 100.60 ft (30.66 m) below land-surface datum, June 22, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVELS) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 1	97.00	MAR 20	98.50	MAY 2	99.30	JUN 16	98.58	JUL 21	96.48	AUG 31	96.58
FEB 8	97.55	MAR 26	98.52	MAY 8	99.28	JUN 22	98.08	JUL 27	96.36	SEP 7	96.70
FEB 14	97.79	MAR 30	99.00	MAY 13	99.29	JUNE 23	98.03	AUG 3	96.47	SEP 14	96.86
FEB 21	97.66	APR 4	98.80	MAY 23	99.28	JUN 29	97.64	AUG 10	96.50	SEP 25	95.89
FEB 28	98.10	APR 11	98.87	MAY 26	99.18	JUL 7	96.97	AUG 17	96.48	SEP 29	96.09
MAR 6	93.24	APR 17	99.00	JUN 2	98.92	JUL 13	96.66	AUG 24	96.66	SEP 30	96.28
MAR 14	98.38	APR 23	99.18	JUN 8	98.88	JUL 20	96.52				

634359148545401. Local number, FC01400704ABCC1001 50001.

LOCATION.--Lat 63°43'59", long 148°54'54", Hydrologic Unit 19030004, near McKinley Park Hotel. Owner: U.S. National Park Service.

AQUIFER.--Fractured schist of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused water-table well. Diameter 8 in (0.20 m), depth 253 ft (77.1 m) cased to 204 ft (62.2 m).

DATUM.--Altitude of land surface is 1,750 ft (533 m). Measuring point: Top of casing 2.50 ft (0.76 m) above land surface.

REMARKS.--Water level at times affected by nearby pumping. Thirty-seven measurements were made by the National Park Service. Measurements on June 23, July 21 and Sept. 30 were made by the Geological Survey.

PERIOD OF RECORD.--1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.33 ft (24.79 m) below land-surface datum, June 2, 1980; lowest measured, 109.42 ft (33.35 m) below land-surface datum, Apr. 10, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 1	98.65	MAR 20	100.03	MAY 2	100.84	JUN 16	81.40	JUL 21	95.48	AUG 31	96.70
FEB 8	98.92	MAR 26	100.14	MAY 8	100.90	JUN 22	82.17	JUL 27	96.14	SEP 7	96.70
FEB 14	99.27	MAR 30	100.17	MAY 13	100.94	JUN 23	82.24	AUG 3	96.45	SEP 14	97.02
FEB 21	99.23	APR 4	100.34	MAY 23	92.02	JUN 29	82.85	AUG 10	96.60	SEP 25	97.03
FEB 28	99.65	APR 11	100.48	MAY 26	85.27	JUL 7	83.26	AUG 17	96.63	SEP 29	96.78
MAR 6	99.72	APR 17	100.52	JUN 2	81.33	JUL 13	89.90	AUG 24	96.79	SEP 30	97.02
MAR 14	101.73	APR 23	100.60	JUN 8	81.43	JUL 20	94.39				

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

SOUTHEAST ALASKA

MENDENHALL VALLEY NEAR JUNEAU WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE SOURCE	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)
58 23 41	134 33 09	04	CD04006617CDDC4001 85438	79-10-04	1600	1/31	67	67	63	150
				79-10-30	1100	2/32	272	272	272	--
				79-11-09	1300	32	360	360	349	--
58 23 41	134 33 09	05	CD04006617CDDC5001 85423	79-10-01	1100	31	82	82	78	1290
				80-02-06	1230	31	106	106	102	1340

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
58 23 41	134 33 09	04	79-10-04	--	--	170	6.8	5.5	74	6	26	2.3
			79-10-30	272	--	364	7.7	6.5	49	0	15	2.7
			79-11-09	360	--	23000	7.4	6.5	2000	1000	120	410
58 23 41	134 33 09	05	79-10-01	--	300	160	6.8	5.5	72	3	25	2.2
			80-02-06	--	170	155	6.8	5.0	63	0	22	2.0

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
58 23 41	134 33 09	04	79-10-04	1.4	3.0	84	--	11	.7	.0	7.5	95
			79-10-30	65	6.8	110	--	11	56	.1	3.7	217
			79-11-09	5000	180	1180	0	63	8300	.4	23	14700
58 23 41	134 33 09	05	79-10-01	1.3	2.9	84	--	12	.8	.1	7.4	95
			80-02-06	1.4	2.6	85	--	4.4	1.2	.0	7.3	85

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
58 23 41	134 33 09	04	79-10-04	.33	0	60	<1	0	0	40	0	1
			79-10-30	.39	1	50	<1	0	0	150	0	190
			79-11-09	.01	15	600	0	0	0	770	0	330
58 23 41	134 33 09	05	79-10-01	.41	0	60	<1	0	0	30	0	<1
			80-02-06	.48	0	50	<1	0	0	<10	0	1

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
58 23 41	134 33 09	04	79-10-04	.1	0	0	20
			79-10-30	.1	0	1	10
			79-11-09	.0	0	0	0
58 23 41	134 33 09	05	79-10-01	.0	0	0	20
			80-02-06	.0	0	0	20

1/ DISCHARGE PIPE
2/ FOERST SAMPLER

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

SOUTH-CENTRAL ALASKA

SEWARD AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)
60 05 35	149 19 23	01	SD00100117BCAD1001 11634	80-08-27	1910	28	100	6.6	3.0	43
60 05 46	149 20 43	01	SD00100118BADB1001 11624	80-08-27	1656	21	64	6.4	4.5	22

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
60 05 35	149 19 23	01	80-08-27	0	16	.8	1.8	1.2	42	0	9.9	2.2
60 05 46	149 20 43	01	80-08-27	5	7.1	1.1	1.5	1.0	25	0	2.5	1.5

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)
60 05 35	149 19 23	01	80-08-27	.1	4.0	57	.17	1	5	<1	0	0
60 05 46	149 20 43	01	80-08-27	.1	7.2	33	.12	1	10	<1	0	0

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)
60 05 35	149 19 23	01	80-08-27	20	0	1	.0	0	<3
60 05 46	149 20 43	01	80-08-27	200	0	50	.0	0	<3

ANCHORAGE (POTTER CREEK AREA) WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
61 03 26	149 45 29	01	SB01100311CAAD2003 03476	80-04-29	1800	193	7.3	3.5	85	10
61 03 56	149 46 02	01	SB01100311BBAB1009 03474	80-04-03	1330	205	6.8	5.0	100	18
61 04 08	149 47 57	01	SB01100303CCBA1007 03462	80-04-03	1200	180	6.4	5.5	84	15
61 04 37	149 43 46	01	SB01100301BADC1003 02119	80-04-29	1400	231	7.6	7.0	100	20

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
61 03 26	149 45 29	01	80-04-29	26	4.8	3.7	.3	100	0	15	.5	.1
61 03 56	149 46 02	01	80-04-03	32	4.8	3.3	.3	100	0	16	1.4	.1
61 04 08	149 47 57	01	80-04-03	27	4.1	3.3	.5	85	0	16	2.5	.0
61 04 37	149 43 46	01	80-04-29	35	3.8	2.4	.0	91	0	14	1.2	.1

QUALITY OF GROUND WATER

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE (POTTER CREEK AREA) WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)
61 03 26	149 45 29	01	80-04-29	11	119	107	.05	.020	1
61 03 56	149 46 02	01	80-04-03	12	126	123	.81	.010	0
61 04 08	149 47 57	01	80-04-03	12	118	113	1.3	.010	1
61 04 37	149 43 46	01	80-04-29	11	134	129	2.5	.000	1

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
61 03 26	149 45 29	01	80-04-29	0	80	0	70
61 03 56	149 46 02	01	80-04-03	33	<10	0	<1
61 04 08	149 47 57	01	80-04-03	110	20	1	<1
61 04 37	149 43 46	01	80-04-29	50	<10	0	5

ANCHORAGE (HUFFMAN HILLS--CAU) WELL

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SAMPLE SOURCE	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)
61 06 11	149 49 55	01	SB01200329ADDA1046 02459	80-03-20	0915	1/31	540	540	500	1380

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
61 06 11	149 49 55	01	80-03-20	315	235	6.6	5.0	110	3	34	6.5	7.5

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
61 06 11	149 49 55	01	80-03-20	132	0	13	1.1	.1	14

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	ARSENIC DIS-SOLVED (UG/L AS AS)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
61 06 11	149 49 55	01	80-03-20	141	4	90	180

1/ DISCHARGE PIPE

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE (INTERNATIONAL AIRPORT ROAD) SANITARY LANDFILL WELLS

LATITUDE	LONGITUDE	SEQ. NO.	LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	SAMPLE SOURCE	SAMPLING CONDITION	DEPTH OF WELL, TOTAL (FEET)
61 10 02	149 55 38	01	SB01300436CCCC1038 02139	80-04-24	1125	3.00	3.0	1/1	--	18
				80-09-25	0905	2.70	2.7	2/26	3/1	18
61 10 05	149 54 48	01	SB01300436CDDB1032 02131	80-04-24	1240	0.90	.90	1	--	18
61 10 13	149 55 08	01	SB01300436CCAA1036 02135	80-04-24	1400	16.60	24	1	--	46
61 10 17	149 55 52	01	SB01300435DACC1020 02137	80-04-24	0950	7.60	7.6	1	--	23
				80-09-25	0810	7.40	7.4	26	1	23

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTANTANEOUS (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CACO3)
61 10 02	149 55 38	01	80-04-24	17	13	40	18	1.0	415	7.2	3.5	190
			80-09-25	17	13	30	18	E1.0	600	7.1	4.0	270
61 10 05	149 54 48	01	80-04-24	18	13	25	18	1.0	505	7.0	2.5	260
61 10 13	149 55 08	01	80-04-24	46	38	40	46	5.0	3020	6.6	3.0	1100
61 10 17	149 55 52	01	80-04-24	23	15	25	23	1.0	78	6.0	3.0	26
			80-09-25	23	15	30	23	<1.0	72	5.8	3.5	24

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
61 10 02	149 55 38	01	80-04-24	47	50	17	6.3	1.1	174	0	49	19
			80-09-25	23	68	25	7.3	1.6	333	0	30	24
61 10 05	149 54 48	01	80-04-24	0	83	13	4.6	.9	320	0	15	8.1
61 10 13	149 55 08	01	80-04-24	0	350	51	130	18	2240	0	3.0	180
61 10 17	149 55 52	01	80-04-24	14	8.0	1.5	2.1	.5	15	0	17	3.1
			80-09-25	12	7.7	1.2	2.1	.5	15	0	14	2.6

LATITUDE	LONGITUDE	SEQ. NO.	DATE OF SAMPLE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
61 10 02	149 55 38	01	80-04-24	.1	31	296	264	.03	4600	460	1.3
			80-09-25	.1	30	373	342	.00	5100	590	13
61 10 05	149 54 48	01	80-04-24	.1	32	348	315	.00	18000	1200	5.4
61 10 13	149 55 08	01	80-04-24	.1	13	1840	1590	.01	170000	9300	140
61 10 17	149 55 52	01	80-04-24	.1	14	57	56	.29	780	60	1.1
			80-09-25	.1	14	51	51	.20	710	60	1.5

1/ WELL HEAD
2/ PUMP
3/ TESTING
E ESTIMATED

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE (MERRILL FIELD) SANITARY LANDFILL WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	SAMPLE SOURCE	SAM-PLING CONDI-TION
61 12 23	149 50 39	01	SB01300320ABDD1033 02398	80-04-25	0915	1.50	--	89	1/1	--
				80-09-24	0910	0.70	--	89	1	3/1
61 12 23	149 50 39	02	SB01300320ABDD2033 02399	80-04-25	1430	1.90	35	1.9	--	--
				80-09-24	1515	2.80	35	2.8	2/26	1
61 12 43	149 50 07	01	SB01300316CCBC1006 02371	80-04-25	1225	17.00	--	91	1	--
				80-09-24	1210	16.00	--	91	1	1
61 12 43	149 50 07	02	SB01300316CCBC2006 02372	80-04-25	1125	16.50	70	68	1	--
				80-09-24	1110	15.60	70	68	1	1
61 12 43	149 50 07	03	SB01300316CCBC3006 02373	80-04-25	1320	7.80	23	7.8	--	--
				80-09-24	1300	7.60	23	7.6	1	1

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)
61 12 23	149 50 39	01	80-04-25	91	91	91	30	91	10	345	8.0	3.5
			80-09-24	91	91	91	30	91	E10	370	8.1	4.0
61 12 23	149 50 39	02	80-04-25	35	35	32	10	45	1.0	750	7.5	5.0
			80-09-24	35	35	32	--	45	<1.0	910	7.5	5.0
61 12 43	149 50 07	01	80-04-25	95	95	95	45	95	7.0	260	7.4	4.0
			80-09-24	95	95	95	30	95	E7.0	270	7.4	4.0
61 12 43	149 50 07	02	80-04-25	70	--	70	45	70	2.0	260	7.7	5.5
			80-09-24	70	70	70	30	70	E2.5	270	7.1	5.0
61 12 43	149 50 07	03	80-04-25	17	17	13	30	19	5.0	4300	6.4	7.0
			80-09-24	17	17	13	20	19	E5.0	4900	6.3	7.0

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
61 12 23	149 50 39	01	80-04-25	140	8	31	15	18	2.0	160	0	32
			80-09-24	140	2	32	15	18	2.2	180	0	40
61 12 23	149 50 39	02	80-04-25	350	93	88	31	22	3.5	310	0	69
			80-09-24	370	150	94	33	23	3.8	310	0	84
61 12 43	149 50 07	01	80-04-25	81	0	20	7.5	23	2.4	150	0	5.3
			80-09-24	76	0	19	7.0	21	2.4	162	0	5.1
61 12 43	149 50 07	02	80-04-25	81	0	20	7.6	22	2.3	150	0	8.3
			80-09-24	77	0	19	7.2	21	2.4	172	0	7.9
61 12 43	149 50 07	03	80-04-25	1500	0	400	120	380	53	2950	0	15
			80-09-24	1900	0	480	160	430	48	2970	0	4.4

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
61 12 23	149 50 39	01	80-04-25	10	.1	13	184	200	.03
			80-09-24	13	.1	13	207	218	.00
61 12 23	149 50 39	02	80-04-25	82	.1	12	505	467	.02
			80-09-24	100	.1	13	494	490	.00
61 12 43	149 50 07	01	80-04-25	4.2	.2	11	155	151	.02
			80-09-24	3.9	.3	11	143	145	.00
61 12 43	149 50 07	02	80-04-25	3.9	.2	11	154	152	.03
			80-09-24	3.7	.3	11	126	148	.00
61 12 43	149 50 07	03	80-04-25	490	.1	30	2780	2940	.00
			80-09-24	610	.1	28	--	3220	.00

1/ WELL HEAD   3/ TESTING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE (MERRILL FIELD) SANITARY LANDFILL WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	ARSENIC DIS-SOLVED (UG/L AS AS)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
61 12 23	149 50 39	01	80-04-25	23	60	100	2.5
			80-09-24	24	40	110	2.3
61 12 23	149 50 39	02	80-04-25	15	4700	1800	9.0
			80-09-24	15	4800	2100	5.6
61 12 43	149 50 07	01	80-04-25	31	2500	450	1.7
			80-09-24	31	2500	400	20
61 12 43	149 50 07	02	80-04-25	25	2500	340	3.5
			80-09-24	30	2800	310	9.2
61 12 43	149 50 07	03	80-04-25	31	76000	17000	220
			80-09-24	40	57000	28000	36

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

YUKON ALASKA

FAIRBANKS AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SAMPLE SOURCE	SAM-PLING CONDI-TION	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)
64 44 38	147 22 07	01	FD00200216BCAB1002 51140	80-08-07	1410	4.20	1/1	5/1	19	19
64 45 22	147 19 01	01	FD00200210ACDC1004 52204	80-04-21	1600	--	2/27	--	21	21
64 45 35	147 20 57	01	FD00200209ABDD1004 52233	80-07-30	1130	--	1	1	--	--
64 45 46	147 24 49	01	FD00200206DDCD1003 51145	80-08-07	1315	5.58	1	1	19	19
64 46 33	147 24 25	01	FD00200205BBBC1001 51146	80-08-07	1210	6.53	1	1	--	--
64 46 43	147 21 55	01	FD00100233CDCC1001 52234	80-07-30	1230	8.24	1	1	--	--
64 46 45	147 28 10	01	FD00100136CCCA1001 52232	80-07-30	1000	5.08	1	1	--	--
64 47 28	147 24 30	01	FD00100231AAAA1001 52235	80-07-30	1400	5.14	1	1	--	--
64 47 42	147 58 48	01	FC00100229DDAB1029 52209	80-05-05	1400	--	3/30	--	--	--
64 47 50	147 30 55	01	FD00100127DACB1002 51159	80-08-07	1040	3.09	1	1	20	20
64 48 22	147 24 30	01	FD00100219DDDD1009 52236	80-08-12	1230	6.16	1	1	--	--
64 48 22	147 26 30	01	FD00100124DDDD1002 52237	80-08-12	1130	2.92	1	1	--	--
64 48 22	147 28 30	01	FD00100123DDDD1001 52238	80-08-12	1030	2.08	1	1	--	--
64 48 22	147 30 30	01	FD00100122DDDD1003 52239	80-07-31	1030	1.22	1	1	--	--
64 48 22	147 32 35	01	FD00100121DDDD1009 52240	80-07-31	0930	4.15	1	1	--	--
64 48 24	147 33 45	01	FB00100121CDCD1006 52131	80-01-31	0900	9.50	27	--	40	40
64 48 25	147 33 56	01	FD00100121CDCC1005 52129	80-01-29	1200	9.01	30	--	110	110
64 48 26	147 33 48	01	FD00100121CDCA2003 52122	80-01-22	1330	--	30	--	97	97
64 48 27	147 33 46	01	FD00100121CDCA3003 52123	80-01-22	1000	--	30	--	95	95
64 48 27	147 33 48	01	FD00100121CDCA1003 52090	80-02-08	1200	--	30	--	99	99
64 48 27	147 33 53	01	FD00100121CDCB1007 52134	80-02-08	1100	--	1	--	110	110
64 48 29	147 24 39	01	FD00100219DDAC1004 52184	80-03-25	1030	--	--	--	30	30
64 48 31	147 33 40	01	FD00100121CDAC1009 52136	80-01-30	1930	--	--	--	--	--
64 48 31	147 33 45	01	FD00100121CDBD2004 52132	80-02-06	1245	--	27	--	--	--
64 48 32	147 33 46	01	FD00100121CDBA2008 52192	80-04-01	1300	--	27	--	--	--
64 48 32	147 33 49	01	FD00100121CDBA1008 52133	80-02-08	1300	--	27	--	--	--
64 48 33	147 24 46	01	FD00100219DDBA1008 52191	80-04-01	1000	--	30	--	--	--
64 48 38	147 24 45	01	FD00100219DACA1007 52187	80-03-27	1030	--	--	--	27	27
64 48 42	147 24 46	01	FD00100219DABD1006 52186	80-03-27	0930	--	--	--	25	25
64 48 43	147 24 38	01	FD00100219DAAB1003 52183	80-03-25	1330	--	--	--	28	28
64 48 44	147 24 48	01	FD00100219DABA1005 52185	80-03-25	1100	--	4/28	--	14	14
64 48 48	147 25 35	01	FD00100219CAAB1002 521[illegible]3	80-01-17	1030	--	30	--	--	--
64 49 15	147 28 30	01	FB00100114DDDD1004 52242	80-08-12	1330	1.23	1	1	--	--
64 49 16	147 30 22	01	FB00100114CCCC1003 52241	80-08-13	1000	6.68	1	1	--	--
64 49 17	147 32 24	01	FD00100115CCCC1001 51166	80-08-07	1000	4.34	1	1	10	10
64 49 45	147 32 18	01	FD00100115BCCA1003 52112	80-01-17	1130	13.65	30	--	60	60
64 49 48	147 33 49	01	FD00100116BDBD1004 51165	80-08-07	0900	14.75	1	1	20	20
64 50 28	147 20 29	01	FD00100209DAAD1001 52099	79-11-29	1100	--	30	--	30	30
64 53 03	147 35 37	01	FA00100129CAAC1015 52094	79-10-03	1400	56.60	30	--	110	110
64 53 16	147 31 01	01	FA00100127ACAC1007 52096	79-10-18	1430	--	1	--	--	--
64 53 19	147 30 28	01	FA00100127ADAB1009 52137	80-02-01	1530	--	3/30	--	185	185
64 53 26	147 30 45	01	FA00100127AACB1006 52095	79-10-03	1530	32.89	30	--	--	--
64 53 29	147 37 24	01	FA00100130ABBC2031 52190	80-04-07	1630	90.80	30	--	--	--
64 53 32	147 30 53	01	FA00100127ABAA1008 52097	79-10-18	1530	--	30	--	150	150
64 53 39	147 35 44	01	FA00100120CDCA1032 52157	80-02-20	1730	--	30	--	214	214
64 53 46	147 31 25	01	FA00100122CDAA1003 51435	80-02-20	1530	--	30	--	240	240
64 53 52	147 36 24	01	FA00100120CBCB1034 52174	80-03-11	0900	--	30	--	--	--
64 53 54	147 40 34	01	FB00100123DAAD1007 52231	80-06-10	1300	132.10	30	--	270	270
64 53 58	147 34 42	01	FA00100120DABA1028 52128	80-02-29	1100	--	30	--	135	135
64 54 01	147 36 12	01	FA00100120BCCD1030 52138	80-02-14	1700	--	30	--	200	200
64 54 04	147 34 28	01	FA00100120ADDA1014 51332	80-03-07	0800	--	30	--	224	224
64 54 18	147 35 50	01	FA00100120BACB1018 51820	80-02-27	1530	--	30	--	98	98
64 54 23	147 35 21	01	FA00100120ABBB1031 52158	80-02-29	1730	--	30	--	285	285
64 54 28	147 32 10	01	FA00100122BBBA1005 52188	80-04-05	1400	--	30	--	210	210
64 54 39	147 44 14	01	FB00100115CBDC1006 52189	80-04-05	1230	--	30	--	150	150
64 55 44	148 02 17	01	FB00100207BDCC1012 52230	80-05-27	1100	129.20	30	--	150	150

1/ WELL HEAD
2/ TAP NEAR WELL
3/ PRESSURE TANK
4/ TAP AWAY FROM WELL
5/ TESTING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
64 44 38	147 22 07	01	80-08-07	--	5	19	310	7.0	3.0	0	0	140
64 45 22	147 19 01	01	80-04-21	--	--	21	375	6.9	9.0	0	0	150
64 45 35	147 20 57	01	80-07-30	--	5	--	420	7.0	3.0	0	0	180
64 45 46	147 24 49	01	80-08-07	--	5	19	320	7.2	4.0	0	0	140
64 46 33	147 24 25	01	80-08-07	--	5	19	410	7.2	1.5	0	0	200
64 46 43	147 21 55	01	80-07-30	--	5	--	600	7.0	2.5	0	0	270
64 46 45	147 28 10	01	80-07-30	--	5	--	340	7.3	4.5	0	--	160
64 47 28	147 24 30	01	80-07-30	--	5	--	430	7.0	3.5	0	0	180
64 47 42	147 58 48	01	80-05-05	--	--	--	550	7.6	13.5	--	--	300
64 47 50	147 30 55	01	80-08-07	--	5	20	360	7.0	4.0	0	0	160
64 48 22	147 24 30	01	80-08-12	--	5	--	360	7.6	8.0	0	0	150
64 48 22	147 26 30	01	80-08-12	--	5	--	420	7.0	2.0	0	0	140
64 48 22	147 28 30	01	80-08-12	--	5	--	360	7.0	9.0	0	0	150
64 48 22	147 30 30	01	80-07-31	--	5	--	310	6.4	4.5	0	0	140
64 48 22	147 32 35	01	80-07-31	--	5	--	500	7.0	3.5	0	0	220
64 48 24	147 33 45	01	80-01-31	--	--	40	342	6.8	5.0	0	0	170
64 48 25	147 33 56	01	80-01-29	--	--	110	575	6.8	12.0	0	0	270
64 48 26	147 33 48	01	80-01-22	--	--	97	340	6.8	15.0	0	0	170
64 48 27	147 33 46	01	80-01-22	--	--	95	--	6.9	4.0	0	0	170
64 48 27	147 33 48	01	80-02-08	--	--	99	370	7.3	10.0	0	0	--
64 48 27	147 33 53	01	80-02-08	--	--	110	450	7.0	5.0	0	0	190
64 48 29	147 24 39	01	80-03-25	--	--	30	--	7.0	6.0	0	0	--
64 48 31	147 33 40	01	80-01-30	--	--	--	338	6.4	4.5	0	0	170
64 48 31	147 33 45	01	80-02-06	--	--	--	380	6.7	4.5	0	0	170
64 48 32	147 33 46	01	80-04-01	--	--	--	370	6.8	8.0	0	0	160
64 48 32	147 33 49	01	80-02-08	--	--	--	378	6.7	1.5	0	0	160
64 48 33	147 24 46	01	80-04-01	--	--	--	398	6.8	6.0	0	0	170
64 48 38	147 24 45	01	80-03-27	--	--	27	--	7.0	7.0	0	0	--
64 48 42	147 24 46	01	80-03-27	--	--	25	--	7.3	12.0	0	0	--
64 48 43	147 24 38	01	80-03-25	--	--	28	390	7.0	3.0	0	0	170
64 48 44	147 24 48	01	80-03-25	--	--	14	500	7.0	8.0	0	0	210
64 48 48	147 25 35	01	80-01-17	--	--	--	350	6.8	6.0	0	0	170
64 49 15	147 28 30	01	80-08-12	--	5	--	--	7.0	3.0	0	1	150
64 49 16	147 30 22	01	80-08-13	--	5	--	340	6.8	2.0	0	0	130
64 49 17	147 32 24	01	80-08-07	--	5	10	290	7.1	5.0	0	0	130
64 49 45	147 32 18	01	80-01-17	--	--	60	312	6.6	6.0	--	--	130
64 49 48	147 33 49	01	80-08-07	--	5	20	--	6.9	2.0	1	--	170
64 50 28	147 20 29	01	79-11-29	--	--	30	180	6.2	2.0	--	--	78
64 53 03	147 35 07	01	79-10-03	--	--	110	700	6.9	4.0	--	--	340
64 53 16	147 31 01	01	79-10-18	--	--	--	800	6.6	2.0	--	--	440
64 53 19	147 30 28	01	80-02-01	170	--	185	800	6.8	5.0	--	--	410
64 53 26	147 30 45	01	79-10-03	--	--	--	825	6.8	8.0	--	--	410
64 53 29	147 37 24	01	80-04-07	--	--	--	1500	6.6	5.5	--	--	--
64 53 32	147 30 53	01	79-10-18	--	--	150	725	6.4	7.0	--	--	400
64 53 39	147 35 44	01	80-02-20	--	--	214	710	6.4	4.0	--	--	270
64 53 46	147 31 25	01	80-02-20	--	--	240	1000	6.6	5.5	--	--	560
64 53 52	147 36 24	01	80-03-11	--	--	--	1100	6.8	5.0	--	--	55
64 53 54	147 40 34	01	80-06-10	240	2	270	1000	7.1	8.5	--	--	520
64 53 58	147 34 42	01	80-02-29	125	--	135	650	--	10.0	--	--	320
64 54 01	147 36 12	01	80-02-14	--	--	200	1100	6.7	7.0	--	--	--
64 54 04	147 34 28	01	80-03-07	209	--	224	425	6.7	4.5	--	--	200
64 54 18	147 35 50	01	80-02-27	65	--	98	450	6.5	5.5	--	--	230
64 54 23	147 35 21	01	80-02-29	--	--	285	350	6.9	6.5	--	2	170
64 54 28	147 32 10	01	80-04-05	183	--	210	300	5.5	5.0	--	--	150
64 54 39	147 44 14	01	80-04-05	122	--	150	240	6.3	10.0	--	--	100
64 55 44	148 02 17	01	80-05-27	--	5	150	338	6.6	7.0	--	--	160

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
64 44 38	147 22 07	01	80-08-07	1	40	10	--	160	--	18	1.9	.1
64 45 22	147 19 01	01	80-04-21	14	45	10	--	180	--	18	3.3	.2
64 45 35	147 20 57	01	80-07-30	0	44	16	--	220	--	29	4.9	.2
64 45 46	147 24 49	01	80-08-07	21	40	10	--	140	--	30	1.5	.1
64 46 33	147 24 25	01	80-08-07	0	54	16	--	240	--	.9	1.1	.1
64 46 43	147 21 55	01	80-07-30	0	82	17	--	340	--	31	5.1	.2
64 46 45	147 28 10	01	80-07-30	0	41	13	--	190	--	26	2.6	.2
64 47 28	147 24 30	01	80-07-30	0	44	17	--	250	--	1.8	.8	.2
64 47 42	147 58 48	01	80-05-05	10	81	23	--	350	--	--	--	--
64 47 50	147 30 55	01	80-08-07	1	43	13	--	190	--	21	1.1	.1
64 48 22	147 24 30	01	80-08-12	0	46	9.4	--	200	--	1.3	1.8	.2
64 48 22	147 26 30	01	80-08-12	0	38	12	--	200	--	--	--	--
64 48 22	147 28 30	01	80-08-12	0	38	14	--	220	--	8.3	1.2	.1
64 48 22	147 30 30	01	80-07-31	0	35	13	--	190	--	4.8	1.1	.2
64 48 22	147 32 35	01	80-07-31	0	64	14	--	300	--	7.2	2.6	.3
64 48 24	147 33 45	01	80-01-31	9	48	13	9.4	200	--	23	15	.2
64 48 25	147 33 56	01	80-01-29	19	78	19	8.0	310	--	9.8	22	.1
64 48 26	147 33 48	01	80-01-22	18	48	11	--	180	--	26	3.1	.2
64 48 27	147 33 46	01	80-01-22	18	48	11	--	180	--	23	3.5	.2
64 48 27	147 33 48	01	80-02-08	--	--	--	--	190	--	24	3.5	.1
64 48 27	147 33 53	01	80-02-08	0	52	14	5.8	250	--	14	9.7	.2
64 48 29	147 24 39	01	80-03-25	--	--	--	--	210	--	5.0	2.6	.1
64 48 31	147 33 40	01	80-01-30	8	49	12	--	200	--	22	5.2	.1
64 48 31	147 33 45	01	80-02-06	3	47	12	10	200	--	22	6.7	.1
64 48 32	147 33 46	01	80-04-01	4	46	11	--	190	--	22	4.7	.1
64 48 32	147 33 49	01	80-02-08	4	47	11	5.0	190	--	23	5.1	.1
64 48 33	147 24 46	01	80-04-01	0	53	10	--	240	--	4.6	5.4	.2
64 48 38	147 24 45	01	80-03-27	--	--	--	--	--	--	5.6	4.3	.1
64 48 42	147 24 46	01	80-03-27	--	--	--	--	210	--	11	2.1	.1
64 48 43	147 24 38	01	80-03-25	0	51	10	--	220	--	12	1.9	.1
64 48 44	147 24 48	01	80-03-25	0	64	13	--	290	--	7.7	5.9	.1
64 48 48	147 25 35	01	80-01-17	0	51	9.4	--	210	--	11	2.2	.1
64 49 15	147 28 30	01	80-08-12	0	44	9.4	--	240	--	4.4	1.1	.1
64 49 16	147 30 22	01	80-08-13	0	35	9.7	--	190	--	8.4	1.7	.2
64 49 17	147 32 24	01	80-08-07	6	36	8.7	--	170	--	12	9.1	.1
64 49 45	147 32 18	01	80-01-17	0	36	8.6	--	170	--	12	1.7	.2
64 49 48	147 33 49	01	80-08-07	13	51	11	--	210	--	20	4.6	.1
64 50 28	147 20 29	01	79-11-29	4	23	4.9	--	90	0	--	--	--
64 53 03	147 35 37	01	79-10-03	41	77	37	--	370	0	--	--	--
64 53 16	147 31 01	01	79-10-18	37	110	40	--	490	0	--	--	--
64 53 19	147 30 28	01	80-02-01	0	100	39	--	589	0	--	--	--
64 53 26	147 30 45	01	79-10-03	0	100	38	--	510	0	--	--	--
64 53 29	147 37 24	01	80-04-07	--	--	--	--	--	--	--	--	--
64 53 32	147 30 53	01	79-10-18	12	95	39	--	470	0	--	--	--
64 53 39	147 35 44	01	80-02-20	90	52	35	--	224	0	--	--	--
64 53 46	147 31 25	01	80-02-20	47	140	50	--	620	0	--	--	--
64 53 52	147 36 24	01	80-03-11	0	14	4.9	--	386	0	--	--	--
64 53 54	147 40 34	01	80-06-10	230	96	67	--	350	--	--	--	--
64 53 58	147 34 42	01	80-02-29	26	96	19	--	356	--	--	--	--
64 54 01	147 36 12	01	80-02-14	--	--	--	--	570	0	--	--	--
64 54 04	147 34 28	01	80-03-07	19	47	20	--	220	0	--	--	--
64 54 18	147 35 50	01	80-02-27	41	54	23	--	230	0	--	--	--
64 54 23	147 35 21	01	80-02-29	19	42	15	--	180	0	--	--	--
64 54 28	147 32 10	01	80-04-05	44	26	20	--	126	0	--	--	--
64 54 39	147 44 14	01	80-04-05	0	22	11	--	150	0	--	--	--
64 55 44	148 02 17	01	80-05-27	27	32	19	--	160	--	--	--	--

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1980

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
64 44 38	147 22 07	01	80-08-07	24	187	--	--	.66	.010	6	14000
64 45 22	147 19 01	01	80-04-21	15	195	--	--	.03	.010	1	990
64 45 35	147 20 57	01	80-07-30	23	255	--	--	2.1	.010	10	4700
64 45 46	147 24 49	01	80-08-07	18	162	--	--	.25	.000	8	3200
64 46 33	147 24 25	01	80-08-07	26	264	--	--	.21	.010	22	57000
64 46 43	147 21 55	01	80-07-30	15	342	--	--	.03	.030	2	480
64 46 45	147 28 10	01	80-07-30	20	218	--	--	.07	.030	7	6300
64 47 28	147 24 30	01	80-07-30	19	241	--	--	.16	.030	4	1800
64 47 42	147 58 48	01	80-05-05	--	--	--	5.3	--	--	0	--
64 47 50	147 30 55	01	80-08-07	24	196	--	--	.04	.010	3	520
64 48 22	147 24 30	01	80-08-12	20	203	--	--	.00	.000	5	3600
64 48 22	147 26 30	01	80-08-12	23	--	--	--	--	--	8	17000
64 48 22	147 28 30	01	80-08-12	25	209	--	--	.00	.010	6	3800
64 48 22	147 30 30	01	80-07-31	17	204	--	--	.61	.030	7	4600
64 48 22	147 32 35	01	80-07-31	28	283	--	--	.07	.080	8	9600
64 48 24	147 33 45	01	80-01-31	23	222	230	--	.03	.010	7	4400
64 48 25	147 33 56	01	80-01-29	18	301	308	--	.08	.000	3	8000
64 48 26	147 33 48	01	80-01-22	25	205	--	--	.21	.050	3	550
64 48 27	147 33 46	01	80-01-22	25	204	--	--	.01	.040	7	1600
64 48 27	147 33 48	01	80-02-08	30	205	--	--	.70	.070	4	90
64 48 27	147 33 53	01	80-02-08	23	233	244	--	.59	.010	4	6700
64 48 29	147 24 39	01	80-03-25	20	195	--	--	.06	.010	5	1200
64 48 31	147 33 40	01	80-01-30	26	220	--	--	.04	.010	6	--
64 48 31	147 33 45	01	80-02-06	23	212	222	--	.70	.020	2	1300
64 48 32	147 33 46	01	80-04-01	24	203	--	--	.36	.020	3	380
64 48 32	147 33 49	01	80-02-08	24	218	210	--	.17	.020	7	740
64 48 33	147 24 46	01	80-04-01	20	225	--	--	.02	.030	5	2100
64 48 38	147 24 45	01	80-03-27	17	236	--	--	1.5	.010	0	--
64 48 42	147 24 46	01	80-03-27	19	213	--	--	2.0	.010	1	220
64 48 43	147 24 38	01	80-03-25	19	205	--	--	.28	.010	1	200
64 48 44	147 24 48	01	80-03-25	21	263	--	--	.08	.010	4	460
64 48 48	147 25 35	01	80-01-17	22	228	--	--	.04	.030	12	4800
64 49 15	147 28 30	01	80-08-12	36	210	--	--	.03	.230	24	31000
64 49 16	147 30 22	01	80-08-13	29	183	--	--	.09	.090	10	8800
64 49 17	147 32 24	01	80-08-07	25	206	--	--	.01	.030	23	24000
64 49 45	147 32 18	01	80-01-17	30	203	--	--	.01	.100	7	8800
64 49 48	147 33 49	01	80-08-07	26	213	--	--	.19	.030	9	6400
64 50 28	147 20 29	01	79-11-29	--	--	--	--	--	--	8	3400
64 53 03	147 35 37	01	79-10-03	--	--	--	--	--	--	0	--
64 53 16	147 31 01	01	79-10-18	--	--	--	--	--	--	0	--
64 53 19	147 30 28	01	80-02-01	--	--	--	--	--	--	400	18000
64 53 26	147 30 45	01	79-10-03	--	--	--	--	--	--	6	14000
64 53 29	147 37 24	01	80-04-07	--	--	--	--	--	--	0	--
64 53 32	147 30 53	01	79-10-18	--	--	--	--	--	--	0	--
64 53 39	147 35 44	01	80-02-20	--	--	--	--	--	--	1	--
64 53 46	147 31 25	01	80-02-20	--	--	--	--	--	--	1	--
64 53 52	147 36 24	01	80-03-11	--	--	--	--	--	--	1	--
64 53 54	147 40 34	01	80-06-10	--	--	--	--	--	--	35	7300
64 53 58	147 34 42	01	80-02-29	--	--	--	--	--	--	1	--
64 54 01	147 36 12	01	80-02-14	--	--	--	13	--	--	10	--
64 54 04	147 34 28	01	80-03-07	--	--	--	.52	--	--	2	--
64 54 18	147 35 50	01	80-02-27	--	--	--	--	--	--	3	--
64 54 23	147 35 21	01	80-02-29	--	--	--	--	--	--	5	--
64 54 28	147 32 10	01	80-04-05	--	--	--	--	--	--	1	--
64 54 39	147 44 14	01	80-04-05	--	--	--	--	--	--	2	--
64 55 44	148 02 17	01	80-05-27	--	--	--	.45	--	--	0	320

WATER QUALITY DATA COLLECTED FROM SPRINGS DURING WATER YEAR 1980

SOUTH-CENTRAL ALASKA

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER		DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
61 13 20	149 16 10	a/01	SA01300116AADA1S	5068S	80-09-26	1400	E1.5	162	5.0	62	8
61 13 20	149 16 24	b/01	SA01300116AACA1S	5069S	80-09-26	1520	--	200	3.5	99	26

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
61 13 20	149 16 10	01	80-09-26	20	3.0	7.4	1.6	13	13	.1	9.1	101
61 13 20	149 16 24	01	80-09-26	34	3.5	2.5	.4	27	.4	.0	5.9	122

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
61 13 20	149 16 10	01	80-09-26	100	.05	.010	2	50	<1	20	4	50
61 13 20	149 16 24	01	80-09-26	121	.84	.010	2	10	1	0	2	20

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
61 13 20	149 16 10	01	80-09-26	2	4	.0	0	0	20
61 13 20	149 16 24	01	80-09-26	0	1	.0	0	0	<3

a/ EAST SPRING EAGLE RIVER TRIBUTARY
b/ MIDDLE SPRING EAGLE RIVER TRIBUTARY
E ESTIMATED

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons